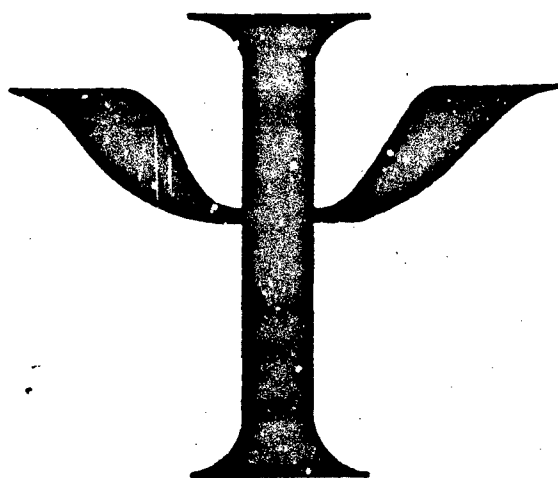


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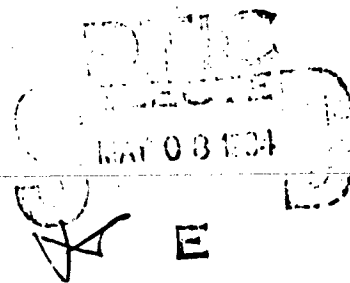
ARMY MEDICAL DEPARTMENT

PSYCHOLOGY SYMPOSIUM



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748	Combat Psychology: The Role of the Division Psychologist in Time of War
749	I'll Never Call You Doctor: An Exercise in Cognitive Dissonance
750	Desertion in the Volunteer Army: A Projection on in absentia Policy
751	Slim Eagle Weight Control Program: The Inter-Disciplinary Approach of the 101st Airborne Division (Air Assault)
752	Military Mobility and Setting Roots in the 30 Year Old
753	A Holistic Approach to Assessing the Psychological Component in Low Back Pain with the MMPI
754	Hypnosis in Army Aviation: A Case Study
755	Psychiatric Symptoms and Syndromes as Related to Deviancies in Brain Functioning and Structure: Review of Research and Role of Clinical Neuropsychology
756	A Review and Updating of Transactional Analysis Game Theory

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ARMY MEDICAL DEPARTMENT PSYCHOLOGY SYMPOSIUM

13 - 17 November 1978

WILLIAM BEAUMONT ARMY MEDICAL CENTER

El Paso, Texas

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PREFACE

The 1978 AMEDD Psychology Symposium was held 13 to 17 November, 1978 at William Beaumont Army Medical Center in El Paso, Texas. Although the majority of the presenters turned in copies of their talks after the Symposium in November, 1979, the collected papers were misplaced. Several other editors have attempted to edit the original efforts; enclosed is my attempt at bringing closure to the 1978 Conference.

A. David Mangelsdorff, Ph.D., M.P.H.

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PROGRAM

AMEDD PSYCHOLOGY SYMPOSIUM
13-17 Nov 78

PLACE: Ft Bliss Officers Club
Bldg 250

<u>DATE</u>	<u>TIME</u>	<u>TITLE OF PRESENTATION</u>	<u>SPEAKER</u>
Mon (13 Nov)	0830	Late Registration	
	0900-1100	Introductory and Welcoming Speech	BG Young
	1100-1200	Present Status, Future Challenges	LTC Richard Hartzell
	1300-1700	The Neuropsychologist as an Expert Witness	Dr. Ralph Reitan
	1300-1400	How to Improve Your Chances on the Promotion Board	Dr. Cecil Harris
	1400-1500	Army Psychology in the 1970's	Dr. E. R. Worthington/ Dr. A. D. Mangelsdorff
	1500-1600	The Behavioral Science Specialist: Training, Utilization and New Directions	Dr. Johnston Beach
	1600-1700	The Reaction of Organized Professional Psychology to the Mental Health Paraprofessional	Drs. Pat & Dave Post
Tue (14 Nov)	0800-0900	Expert Witness - Client or Therapist? Or Phenomenological Approach to Practical Psychotherapy	Dr. Steve Lifrak
	0800-0900	Evaluating Psychological Services	Dr. Jerry Clark
	0900-1500	Change and Principles of Brief Psychotherapy	Dr. John Weakland
Wed (15 Nov)	0830-1500	Language and Change in Psychotherapy	Dr. Richard Bandler

<u>DATE</u>	<u>TIME</u>	<u>TITLE OF PRESENTATION</u>	<u>SPEAKER</u>
	1500-1700	Essentials of Primary Mental Health Care	Dr. Logan Wright
	1500-1700	American Psychological Association - Serving the Community, Serving the Membership and Serving Psychology + New Frontiers and the Law	Dr. Ted Blau
Thu (16 Nov)	0800-0900	Combat Psychology: The Role of the Division Psychologist in Time of War	Dr. E. R. Worthington
	0800-0900	Issues of Confidentiality for Army Psychologists	Dr. Robert Hulsebus
	0900-1000	"I'll Never Call You Doctor" - An Exercise in Cognitive Dissonance	Dr. Gregory Laskow
	0900-1000	Desertion in the Volunteer Army: A Projection on <u>In Absentia</u> Policy	Dr. Gary Greenfield
	1000-1100	The Prediction of Performance and Attrition of Recruits During Basic Training	Dr. Dennis Kowal
	1000-1100	Weight Control Program	Dr. Ray Gentry
	1100-1200	Life Satisfaction in Mobile and Non-Mobile Adults in the Early 30s	Dr. William Wilson
	1100-1200	A Holistic Approach to Assessing the Psychological Component in Low Back Pain with the MPI	Dr. Frank Rath
	1300-1400	Interpersonal Competition Within the Officer Corps	Dr. Gary Greenfield
	1300-1400	Psychosocial Aspects of Organizational Development	Dr. Jack Bentham

<u>DATE</u>	<u>TIME</u>	<u>TITLE OF PRESENTATION</u>	<u>SPEAKER</u>
	1400-1700	Development of Strategic Intervention in Brief Family Therapy	Dr. Harold Goolishian
Fr1 (17 Nov)	0800-0900	Workshop in the Handling of Hostages	Dr. James Turner
	0800-0900	Hypnosis in Army Aviation	Dr. Ray Gentry
	0900-1000	APA and AAP: What We Can Do Together to Improve the Professional Recognition of Psychology	Dr. Joan Zaro
Fr1 (17 Nov)	1000-1200	Forensic Hypnotherapy	Dr. Harold Crasilneck
	1000-1200	Psychiatric Symptoms and Syndromes as Related to Deviances in Brain Functioning and Structure: Review of Research and Role of Clinical Neuropsychology	Dr. Ray Parker
	1300-1500	Consultation in a Medical Center	Dr. Leonard Goodstein
	1300-1500	A Review and Updating of Transactional Analysis Game Theory	Dr. Donald Taylor
	1500-1700	Conference Wrap-up	LTC R. E. Hartzell

MILITARY CONSULTANTS

Dr. Jack Bentham	Psychosocial Aspects of Organizational Development
Dr. Johnston Beach	The Behavioral Science Specialist: Training, Utilization and New Directions
Dr. Ray Gentry	Weight Control Program (Thursday) Hypnosis in Army Aviation (Friday)
Dr. Gary Greenfield	Desertion in the Volunteer Army: A Projection on <u>In Absentia</u> Policy (Thursday morning) Interpersonal Competition Within the Officer Corps (Thursday afternoon)
Dr. Cecil Harris	How to Improve Your Chances on the Promotion Board
Dr. Robert Hulsebus	Issues of Confidentiality For Army Psychologists
Dr. Dennis Kowal	The Prediction of Performance and Attrition of Recruits During Basic Training
Dr. Gregory Laskow	"I'll Never Call You Doctor" An Exercise in Cognitive Dissonance
Dr. Ray Parker	Psychiatric Symptoms and Syndromes as Related to Deviancies in Brain Functioning and Structure: Review of Research and Role of Clinical Neuropsychology
Drs. Dave & Pat Post	The Reaction of Organized Professional Psychology to the Mental Health Paraprofessional
Dr. Frank Rath	Low Back Pain: Assessment With the MMPI
Dr. Donald Taylor	A Review and Updating of Transactional Analysis Game Theory
Dr. James Turner	Workshop in the Handling of hostages
Dr. William Wilson	Comparison of Military and Civilian Couples on Life Satisfaction Measures
Dr. E. R. Worthington	Combat Psychology: The Role of the Division Psychologist in Time of War (Thursday) Army Psychology in the 1970's (Monday)

CIVILIAN CONSULTANTS

Dr. Richard Bandler	Language and Change in Psychotherapy
Dr. Ted Blau	American Psychological Association - Serving the Community, Serving the Membership and Serving Psychology
	New Frontiers for Psychology and the Law
Dr. Jerry Clark	Evaluating Psychological Services
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Dr. Joan Zaro	APA & AAP: What We Can Do Together to Improve the Professional Recognition of Psychology

Proceedings of the AMEDD Psychology Symposium
13-17 November 1978, William Beaumont Army Medical Center

INTRODUCTION AND WELCOME

James J. Young
Commanding General
William Beaumont Army Medical Center
El Paso, Texas

As Commanding General of William Beaumont Army Medical Center, I welcome you to sunny El Paso, the home of Fort Bliss and WBAMC. General Young, welcome back to WBAMC. I hope your stay in El Paso is rewarding as well as relaxing. LTC Hartzell, welcome. Your program development efforts during your tour of duty at WBAMC lives on and is a credit to your professional creativity, insight, and dedication. In the audience there sit many former interns and staff members. Your graduation pictures which hang so proudly in the Psychology Service's main hallway represent a formidable alumni. Welcome back. I encourage you all not only to involve yourself in the jam-packed program so well conceived by the course directors, but to probe the Fort Bliss grounds and connect with its heritage. Our WBAMC complex is a beautiful medical center and well worth your perusal. Also, please make some efforts to soak in the El Paso-Juarez scenery and digest the flavors of ancient and modern America and Mexico so well represented by the brother, border towns of El Paso and Juarez.

Each and every one of you are vested with missions designed to maintain the manpower so prerequisite for our nation's defense. Your five-day schedule is a sample of how you approach completion of your mental health mission. Your psychodiagnostic efforts contribute to key differential diagnoses leading to the delivery of cost-effective and efficient medical services and feedback to the field commanders crucial information leading to a better adjusted soldier and a more cohesed organizational structure. To help the soldier adjust to their stressful environment is a credit to your professional abilities. The pioneering efforts of Dr. Ralph Reitan and the forensic implications of the brain behavior loop is a featured presentation today. Your psychotherapeutic efforts contribute to the increased functioning of not only the soldier but the marital unit and the family complex. The innovative presentations of Drs. Weakland, Bandler, Goolishian, and Lifrak during your symposium will hopefully advance your therapeutic skills. Organizational development will be addressed by Dr. Goodstein and professional issues by Drs. Blau, Zaro, Wright, and Clark. Paraprofessional development is a vital link in our behavioral science chain. I welcome all the visiting consultants and congratulate you all on your professional contributions and your willingness to share your perceptions with the symposium participants.

I have taken particular note of the quantity and quality of the presentations by our military psychologists. The wide varieties of topics and the

specificity of your presentations is indicative of your professional development and military dedication. The combination of visiting consultants and military presentations form a potent concoction with all the symposium participants the winners.

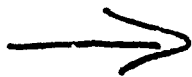
I would like to extend my congratulations to CPT Bentham and his staff for their efforts in orchestrating this symposium. CPT Gerry Bryan and Miss Mimi Paxton deserve particular recognition for their endless dedication on your behalf. Each staff member remains available to help make this a valuable professional symposium.

Enough said. Welcome to Fort Bliss, WBAMC, and the El Paso-Juarez communities. My best wishes for a fine symposium and continued success in your mental health careers. Thank you.

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Proceedings of the AMEDD Psychology Symposium
13-17 November 1978, William Beaumont Army Medical Center

AMEDD PSYCHOLOGY IN THE SEVENTIES



E. R. Worthington, Ph.D.
Brooke Army Medical Center
Fort Sam Houston, Texas 78234

In 1972 United States involvement in the Vietnam conflict, the longest war in our history, was terminated. This complex struggle in Southeast Asia had a profound effect on our society as well as the U.S. Army. The size of the active Army has decreased drastically in the 1970's. Job specialties open to women have increased and the U.S. Military Academy now has female cadets. Reduced promotion, passovers, RIFs and other events associated with the process of turning a large wartime military force into a smaller peace time Army have occurred. The Army has also become an "all-volunteer" force, the draft has ended. It must now compete with the private sector for recruiting and maintaining human resources. This has created an added awareness on the importance of identifying and understanding relative factors of job satisfaction. The supply of human resources is primarily dependent upon two variables; the civilian job market and the Army's ability to meet the needs of its soldiers. These factors have motivated the Army to spend considerable time and energy implementing many human resource development programs. Their stated goals reflect ideas of enhancing human potential, creating job satisfaction and enrichment, increasing organizational effectiveness, and generally improving the quality of life for those in uniform. All of this has transpired in the 1970's. As expected, these events have not passed unnoticed in the Army Medical Department (AMEDD), especially as it applies to AMEDD Psychology. Until 1974 the primary means of procuring Ph.D. psychologists was through an AMEDD Graduate Student Program. Each year 5-10 psychology graduate students were recruited into this program. They had to have completed at least one year of graduate school yet be able to complete both their academic requirements and their internship in no more than three years. If they met these requirements and were also eligible for commissioning, they could be selected and brought on active duty (as a graduate student) as a 1LT or a Captain. This program terminated in 1974. AMEDD personnel stated the Army was able to find sufficient fully qualified civilian psychologists requesting active duty assignments. Therefore, there was no need to continue to fund a training program. While the program was an unqualified success in procuring new psychologists, the individuals seldom remained on active duty beyond their initial commitment. A new training procurement program was implemented in 1977. The three AMEDD American Psychological Association approved internship training sites (Walter Reed Army Medical Center, William Beaumont Army Medical Center and the Army Hospital at Fort Ord, California) received six Army interns graduated from psychology programs. In September 1978 eleven interns began training at these intern sites. Next year (1979) the number of interns is expected to increase to sixteen and Eisenhower Army Medical Center will become our fourth intern site. There is a post-

doctoral fellowship in child psychology at WBAMC and another post-doctoral fellowship in Community Mental Health has been approved for BAMC. An additional post-doctoral neuropsychology fellowship at Madigan Army Medical Center is currently under consideration. Basically there are two types of AMEDD psychologists: (1) clinicians: clinical, counseling, educational, etc., and (2) researchers: research, industrial, experimental, etc. In 1978 the U.S. Army has 96 clinical psychologists and 37 researchers on active duty. This represents almost a 3 to 1 ratio. In 1972 there were 77 clinicians and 38 researchers; a 2 to 1 ratio. It also shows a 16% increase in total AMEDD psychologists over the past five years. During the period the total MSC strength has remained steady with 4500 officers.

Psychology Officer Strength

1972	Clinical	77
	Research	38
	Total	<u>115</u>
1974	Clinical	86
	Research	38
	Total	<u>124</u>
1977	Clinical	94
	Research	32
	Total	<u>126</u>
1978	Clinical	96
	Research	37
	Total	<u>133</u>

An examination of the rank structure of AMEDD psychologists reveals almost a 300% increase in field grade strength in the past five years. In the late 1960's and early 1970's the previous Army Surgeon General's Psychology Consultant, Colonel Charles A. Thomas, Jr., recognized a need to recruit individuals with previous military experience into the psychology graduate student program. He felt that if these people could be successfully recruited, their potential for remaining on active duty would be extremely high. This proved true. Several psychology graduate students brought into the program were reserve officers (senior captains and majors) with previous active duty tours in other branches of the Army. These men have remained on active duty and received subsequent promotions. The following chart presents a breakdown by rank comparing the number of officers on active duty in 1972 to 1978.

<u>RANK</u>	<u>1972</u>	<u>1978</u>
COL	2	1
LTC	3	7
MAJ	3	15
CPT	105	105
LT	<u>2</u>	<u>5</u>
Total Officers	115	133

In 1978 one major was selected for lieutenant colonel and 12 captains were selected for major. Another interesting area of comparison is where AMEDD psychologists were assigned in 1972 and where they are being assigned today. Many positions today were not available six years ago. For example, each Army combat division in the U.S. has an AMEDD psychologist position in the Mental Health Section of the Medical Battalion. These positions did not exist in 1972. As Vietnam ended, considerable combat strength was shifted from Southeast Asia to Europe. This has assisted in the buildup of mental health professionals in Army units and support organizations throughout Germany. With more psychologists remaining on active duty there are more opportunities to participate in career education programs (i.e., post-doctoral fellowship, the Officers Advanced Branch Course, Command and General Staff College). There has also been an increased demand for AMEDD psychologists to be assigned to non-AMEDD positions. These assignments require the expertise of a behavioral scientist in areas of research design, human resource development, teaching, health care studies, organizational behavior consultation, for example. The following chart depicts various areas of assignments reflecting changes over the past six years.

<u>Assignment</u>	<u>Number of personnel assigned</u>	
	<u>1972</u>	<u>1978</u>
Europe	7	18
FORSCOM	0	10
Career Education	0	4
Non-AMEDD positions	6	10

No Change

Health Services Command
Academy of Health Sciences

Decreased Emphasis

Pacific	5 (1974)	0
Research positions	37	28
Graduate Student Program	55	0

This has been a brief review of changes in AMEDD Psychology during the last six years. During this time period the Army has decreased in size; the MSC strength has remained stable with about 4500 officers assigned; and AMEDD

Psychology has increased in size (115 to 133). This suggests that there exists a recognized need for Army behavioral scientists. Today AMEDD psychologists are serving in a variety of positions throughout the world. Current available assignment locations are:

1978 Assignment Locations

Clinical Psychologists (68S)

Health Services Command (CONUS)	63
U. S. Military Academy	2
TRADOC (CONUS)	4
FORSCOM (CONUS)	11
Europe	16
Korea	1
Total	97

Research Psychologists (68T)

Development & Research Command	12
DOD/Joint	1
Office of the Surgeon General	23
TRADOC	3
Total	39

Two problems are beginning to develop. During the 1960's and early 1970's there were few senior psychology officers. Most assignments were established for the rank of captain with some positions for majors. Today's majors and lieutenant colonels do not find these positions challenging after two or three years. These officers are now searching for new areas of responsibility, which in most cases, requires leaving the immediate area of psychology. One colonel was assigned to the faculty of the Army War College; a lieutenant colonel was selected for appointment as Chairman of the Leadership Department at the USMA (this included a promotion to colonel). Two field grade positions have been developed at the Uniformed Services University of the Health Sciences. Another officer, a major, was selected to attend the USA Organizational Effectiveness Staff Officer course at Fort Ord, California. Upon completion of the 15 week school in organizational consultation, he was assigned to the Organizational Effectiveness Training Center as a faculty member. These are but some of the possibilities available in the late 1970's for AMEDD psychologists. The second problem involves complex issues of job dissatisfaction (i.e., lengthy time in grade requirements for field grade promotion, mandatory non-psychology duties such as AOD, and military moves) which results in good psychologists leaving active duty coupled with requirements for additional psychology positions for field grade officers (i.e. Germany, Alaska, Fort Bragg, BAMC, etc). This will result in approximately 22 clinical and research positions remaining unfilled in FY 1979.

→ In comparison to other MSC career fields psychology has fared extremely well in the 1970's. We have increased our field grade strength considerably and →

at a percentage which exceeds the average for the Medical Service Corps as a whole. Several new positions have been developed and many senior psychologists are assuming assignments external to traditional clinical or research roles. There is also increased opportunity for internship and post-doctoral fellowship training. On the negative side some good psychologists are leaving active duty after 5-10 years, which is resulting in some vacant positions for FY 1979.

←

Proceedings of the AMEDD Psychology Symposium
13-17 November 1978, William Beaumont Army Medical Center

WHY DO SOME ARMY PSYCHOLOGISTS LEAVE THE SERVICE?

A. David Mangelsdorff, Ph.D.
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The retention of health care professionals like psychologists and physicians has been a continuing concern for the military services. The problem of retaining military health care officers has been addressed at varying times (Hedlund, 1968; Cooke and Mixson, 1967, 1971; Baker, 1969; Boyson, 1967; Winker, 1968; Braunstein, 1974; Mangelsdorff and Hubbart, 1976; Watson, 1976; Jorlett, 1975; Lanier, 1975; Krause, 1978; Dully, 1974). Among the recurrent findings influencing health care professionals to leave the service were: inadequate pay, possibility of command or administrative assignments, lack of amount of participation in making decisions affecting own career, lack of sense of belonging to the community and social life of the military, and poor facilities. The purpose of this study was to document what factors induce some psychologists to remain in the Army and what causes other psychologists to leave the service. The intents are to determine what factors would increase the likelihood of psychologists remaining on active duty and to document what degree of job satisfaction Army psychologists report.

METHOD

Subjects. Active duty Army psychologists (N = 130) and psychologists who had left the Army since July 1974 to November 1976 (N = 69) were included.

Procedure. Each psychologist was mailed a survey instrument which requested demographic background, military background, attitudes toward military career, levels of satisfaction, retention factors, and the Job Descriptive Index (Smith et al, 1969). A personal letter requesting participation was provided in addition to an official request from the Academy of Health Sciences. Return self-addressed envelopes were provided. Active duty psychologists were asked to use a 7-point Likert scale to rate how satisfied they felt about a variety of issues. Psychologists who had left the Army between July, 1974 and November, 1976 were instructed to answer the survey questions as though they had six months remaining in their active duty obligation. A follow-up was conducted requesting psychologists who probably had not participated to indicate whether they would respond, needed a questionnaire, or would not return the survey.

RESULTS

Sample Characteristics. Of the active duty psychologists, 114 of 130 (88%) responded; of the psychologists who left the Army, 48 of 69 (70%) returned the questionnaire. The average age of the sample was 31 years. See Table 1.

Job Descriptive Index. The Job Descriptive Index scales (JDI) were scored and analyzed as dependent variables using analysis of variance (ANOVA) procedures (Nie et al, 1975). The JDI consists of five subscales measuring different aspects of an individual's attitudes toward their job. The subscales include: WORK, SUPERVISOR, CO-WORKERS, PAY, and PROMOTIONS. There was only one significant difference between Active Duty and Left Service groups on the JDI scores, that for PROMOTIONS, where the Active Duty group reported significantly greater satisfaction than the Left Service group ($F = 4.588$ (1/153), $p = .034$).

Discriminant Analyses. Stepwise (Wilks procedure) discriminant analyses were conducted to separate Active Duty and Left Service groups using 35 Satisfaction set attitude items (7-point Likert), one subscale of the Job Descriptive Index, and 15 Demographic section items. Items having F values equaling or exceeding 1.00 were extracted as discriminator items. Also items selected had to have been responded to by at least 145 psychologists. Table 2 extracts the significant discriminants as entered in the stepwise procedure. The discriminant function developed, a 20 item function, correctly classified individuals 84.0% overall into their respective groups. The Active Duty group ($N = 114$) was correctly classified 85.1%, while the Left Service group ($N = 48$) was correctly categorized 81.3%. The discriminant function was significant ($\chi^2 = 74.69$, $p < .01$).

Validation Sample Regression. Stepwise regression analyses were performed to predict responses to the 7-point criterion "Likelihood remain until eligible for retirement" (1 = low probability, 7 = high probability) using as independent variables the responses by the Active Duty sample ($N = 114$) to Satisfaction set attitude items-(7-point Likert), JDI subscales, and Demographic section items. An eight item equation was developed (Table 3 contains the items and beta for each item). The raw beta weights developed from the Active Duty sample were applied for validation to the responses of the Left Service group to predict the Left Service responses to the criterion item "Likelihood remain." (The 7-point criterion was collapsed as follows: 1, 2 = Leave; 3, 4, 5 = Undecided; 6, 7 = Stay). Table 4 summarizes the distributions for predicted versus the actual responses of the Left Service group ($\chi^2 = 1.02$, $p = n.s.$).

DISCUSSION

The most significant discriminant (as entered in the stepwise procedure) was satisfaction with Personal control over how my own career develops, followed by the extent of Participation in military oriented social activities. With respect to the perception of personal control, Nord (1977), Seeman (1972), and Form (1975) suggest that the power individuals exercise over the situations that

affect them, relative to their expectation of how much influence they should have, may be an important determinant in job satisfaction. Since nearly all of the psychologists who left the service were captains (the one exception retired from the Army), there may have been some feelings of powerlessness in their position by some of the psychologists who left the service. Shephard and Panko (1974) note that power-deficient workers had less commitment to organizational goals. Of the Left Service group, all but one rank ordered themselves as psychologists first, and all placed their rank ordering of self as military officer as lowest.

With competition from civilian jobs perhaps offering higher pay, independence, stability, opportunities for self-improvement, or some facet not otherwise found in the military, an Army psychologist may choose not to remain in the Army. In addition, factors supporting a negative view of the military may influence the decision to leave the service. The specific issues discernible from the analyses (using the standardized discriminant function coefficients) which suggested an individual would be in the Left Service group were the degree of satisfaction with: The amount of leisure time I have available, Having rank commensurate with experience, Availability of civilian non-federal job opportunities, Opportunity for self-improvement outside my job, and Personal accomplishments as a military psychologist. In addition, the extent Feel a sense of belonging to the community and social life of the military and probability of Entering military service for military pay and fringe benefits relative to those available as a civilian at that stage of my professional education were significant contributors of Left Service psychologists. The Left Service psychologists generally did not feel part of the military. Looking at the regression equation to predict "Likelihood remain until retire", reporting a high Sense of membership in Army and having several Years of active military service completed enhanced the probability of remaining in the Army. Social and professional support for the decision (whether to leave or remain in the service) is critical. It would be quite difficult to remain in the service without support from a spouse (or significant other) and/or co-workers.

In addition, job satisfaction, accomplishments, and personal and/or professional growth must be considered. Issues which contribute to categorizing a psychologist in the Active Duty group dealt with the development of an identity as a career military officer concerned with career progression, how the current assignment allowed for personal accomplishments as a military officer, and how the individual viewed himself. Specifically, Likelihood promoted was a great concern to the individual (as evidenced by the large discriminant function coefficient and by the validation sample beta). Further support for this concern with promotions comes from the analysis of variance between the Left Service versus the Active Duty group scores on the JDI PROMOTIONS subscales, where there was a significant difference between the groups ($p < .05$). Participation in military oriented activities may be perceived as possibly affecting one's military career. The benefits of joining the Army for educational opportunities must also be emphasized. A sizable number of psychologist joined the Army for the Graduate Student Program and for the educational benefits available after service. If more opportunities for professional growth and development were available through the Army, perhaps more psychologists would consider remaining

on active duty to take advantage of them. For Army physicians, the availability of residencies and post-residency specialized fellowships has been cited as a very significant factor in why some physicians remain in the Army (Krause, 1978; Whelan, 1974).

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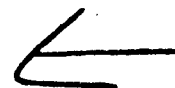
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THE BEHAVIORAL SCIENCE SPECIALIST: TRAINING, UTILIZATION, AND NEW DIRECTIONS



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The last meeting of this nature I attended was the Current Trends in AMEDD Behavioral Science Conference at Walter Reed in June of 1977. The United States, as well as the U.S. Army, had finished celebrating its 200th birthday, and someone of stature - I honestly cannot remember whether it was a colonel or a general was stating that in spite of all the contributions of modern technology which have dramatically changed the Army's weaponry, and its means of communication and transportation, in certain essential respects today's Army is much the same as Washington's Army of revolution. The Army continues to be what it has always been - an organization of people, and their mission remains unchanged.

Although the implements of war are more sophisticated, and perhaps more savage than 200 years ago, they are still the tools of man. They must be maintained and used by men and women; and they do not eliminate the urgent need for soldiery discipline, courage, commitment, cooperation, intelligence and good physical and mental health. It is this human factor that continues to be critical in the military equation. Human needs, human problems, and human potential will remain vital considerations if the Army is to accomplish its assigned mission.

The Army continues to require the individual soldier and his/her family to endure many personal hardships and to make many sacrifices seldom demanded outside of the military. I need not enumerate them for you. Frequent reassignment, unaccompanied tours, at times life threatening work and the authoritarian nature of the military organization are stress producing realities faced by all members of the Army. Such hardships often create problems in the life of a soldier and his/her family that cannot be ignored if the Army is to function effectively. Accordingly, commanders at all levels are charged to be concerned about, and attentive to, the welfare of their personnel. To assist commanders, the Army has developed systems for the delivery of health care and other human services. Throughout the Army's human service delivery system, the Behavioral Science Specialist (BBS) can be found working to assure that the important services are provided; there herein lies the 91G's central importance to the successful accomplishment of the Army's mission. She/he is a direct service provider. The effectiveness of the Army's human service programs, to a great extent, depends on the manner in which the Behavioral Science Specialist performs his/her role.

The Behavioral Science Specialist actually makes many of the programs work. She/he performs many tasks that help to meet a variety of human needs. These tasks include direct patient care such as counseling and testing, as well as command consultation, supervision and administration in a wide range of programs. Carrying out this job requires knowledge of the complexities of human behavior and the skill to translate this knowledge into action. It also demands a great deal of responsibility, for the Behavioral Science Specialist deals directly with the Army's most valuable resource - its people.

In his/her effort to prevent or alleviate social or emotional dysfunction the 91G may find himself in a variety of settings. S/He may work within the Army's Medical Department, in facilities that range from large medical centers to small dispensaries, in both fixed and non-fixed settings. Some 91Gs serve in confinement and correctional facilities, extending from local area confinement facilities to the Retraining Brigade at Ft. Riley and the Disciplinary Barracks at Ft. Leavenworth. Others work in the Army Community Services and for the Army Alcohol and Drug Prevention and Control Program. Still others may teach or do research.

If you have been listening, and I, of course, trust you have, I have been telling you about an individual who counsels, tests, consults, teaches, and may even do research. One has got to be somewhat impressed with an individual who can do all that. But who is he, and what is his training? I say he, but actually about half are shes.

TRAINING

When s/he comes to you from the Academy of Health Sciences, she/he is on the average just under 23 years old. About half are married and the average rank is E-3. S/He has a mean GT score of 116 and a ST score of nearly 115. S/He has had 12.8 years of education, plus 8 weeks Basic Combat Training, 8 weeks of 91B or Basic Medical Specialist training and 10 weeks training as a 91G (Behavioral Science Specialist). With the exception of being somewhat younger, s/he is basically your average mental health paraprofessional (the average paraprofessional is a 27 year old male or female high school graduate). S/He, however, is probably asked to perform a much more varied and higher level set of tasks than most.

During his/her ten (10) weeks of 91G training, s/he undergoes four-hundred (400) hours of training. Three-hundred and sixty-nine (369) of which are academic in nature. In actuality, if you discount administrative time and "PT", you are left with two-hundred and ninety-three (293) classroom hours. These hours are broken down into three general categories: Basic Concepts, Psychopathology, and Interviewing.

Basic Concepts introduces the student to basic sociology, human sexual behavior and human development. It also familiarizes them with mental health practice in the military setting, with classes such as command consultation, orientation to medical social work and corrections in the military. Finally, they give an overview of drug abuse and the Army's drug treatment programs.

The objectives of these hours are to help the student: to identify and be able to describe the principle factors affecting an individual's personality and adjustment to his environment; to identify and describe selected sociological concepts, to become familiar with the facilities to which s/he may be assigned and the tasks to be performed in those settings, to become aware of the various welfare services available in the military, and to describe the Army regulations pertinent to him/her and his/her role in administrative proceedings. Finally, the drug hours are aimed at acquainting the perspective Behavioral Science Specialist with the basic concepts of drug abuse and the drug abuse treatment program.

An even wider spectrum of subjects fall under the rubric of psychopathology. First of all, as the name implies, these hours introduce the students to the world of the individual who suffers such things as neurotic breakdown, psychotic disorders or various transient situational disturbances. It also covers such topics as the mental status examination and psychological testing. In addition, it introduces treatment modalities such as crisis intervention and dealing with a middle phase which includes both an exploration of the problem and the individual's background; and a closing phase. This phase includes a summary of the interview, an attempt to involve the client in the decision making process and an appropriate disposition.

In addition to these content areas, various so-called skill areas of the interview are evaluated. The individual's interviewing techniques are observed. Does s/he reflect feelings? Does s/he paraphrase content? Does s/he pick up on verbal and non-verbal cues? Are his/her transitions from one topic to another smooth? Both the presence and the quality of these skills are taken into account.

The student's questioning technique is examined. Is there an open invitation for the client to talk? Are open-ended questions used as opposed to close-ended questions? Does s/he use single questions rather than compound questions? Are his/her questions clear and to the point? Finally, are they appropriate to the direction of the interview?

His/Her attending behaviors are also observed. Does the interviewer attempt to maintain eye contact? Is his/her posture evidence of his/her involvement? Does s/he seem to follow the flow of the conversation? Any distracting mannerisms are also noted.

In determining if the interview is passed, the instructor responds in a "yes-no", "go-no-go" manner to five questions. One, "Did the interviewer find out what the client's problem was? That is, was s/he able to define with some clarity what is troubling the client? Secondly, was the relevant information obtained? Did the interviewer investigate the client's family, his education, his sexual history, his drug history, etc.? Did s/he examine the necessary areas of the individual's life that would shed light on his current difficulties and was the depth of this information adequate for understanding the client's problem? Was the client involved in the decision making process? Finally, did

the student demonstrate a knowledge of basic interviewing skills and techniques?
A No response to any one of these questions constitutes a failure.

Having passed the final interview, one task still remains; the student must present the interview in written form. For the write-up to be acceptable, it must be in the correct format, contain accurate information, and be completed in two hours and ten minutes. As you can see from the handout, the correct format consists of: the appropriate identification data, the source and reason for referral, background information, mental status findings, the specialist's impressions, and his/her disposition. Again failure on either the interview or write-up results in a reteach and a retest. Failure on the retest results in the MOS being withheld.

If the final interview and write-up are acceptable, the student becomes a 91G and within a day or so is on his/her way to his/her new assignment. His/her ten weeks have been very busy, but they are just ten weeks and they have been directed, to a great extent, to the accomplishing of one mission - producing a basic level intake interviewer. S/He is not a counselor. S/He is not a psychological tester. Nor is s/he fully prepared to carry out consultation and certainly not to supervise or to do research. The dilemma unfortunately is well known to each of us; the demand for these services far outweighs the number of professionals available to meet it. Logic and necessity dictate the use of paraprofessionals. The problem now becomes - how do we utilize them most effectively?

UTILIZATION

At least two possible approaches seem obvious, and they have been discussed in the literature. One approach is job factoring. This involves analyzing just what it is the professionals do and adopt these tasks for the paraprofessional also. This, however, fosters the erroneous philosophy that "anyone can do anything."

The second approach is developmental in nature. You study the needs that are unmet by the existing professionals, develop a rationale for grouping these functions and assign them to various levels of workers. This approach is seen as more effective by most, although it is probably used less often. It is my personal belief that this is, and was, the system intended by those who originally initiated the Army's mental health delivery system.

Ideally, this system would be composed of a continuum of levels of workers where the particular task in question is carried out by the person who has the least education, but who still is competent enough to carry out the task. This would allow each higher level to now invest themselves in more specialized work. In most Army clinics, however, and probably in all of them outside of a few medical centers, informal job factoring has resulted and there exists a situation where everyone is doing everything, or is attempting to do so, regardless of education or experiential background.

I believe that the breakdown of the developmental model - or I should say the reason it seldom develops in the Army - is it is predicated on a rank structure that while valid in the combat arms is not as of yet a reality in the mental health field. The theory is simple and you all know it well. Each unit is made up of so many E-1's and E-2's, E-3's etc. on up to E-9. The lower the grade level, the more restricted the job and the less skills required. Each rank has its function and place within the command and task structure; and the higher up the rank structure you move, the more experience you personally have had with the jobs of your subordinates. You have carried out these jobs and, as you advance, your contact with these jobs remain while your duties expand. In theory this is true of 91Gs. There are "1" level tasks required of the 91G10; "2" level tasks required of the 91G20; "3" level tasks required of the 91G30, etc. This model is not only simple but logical - when you are dealing with the career soldier. Few 91Gs, however, are career soldiers and of the career soldiers who are 91Gs, very few have been career 91Gs. Frequently, the clinic NCOIC is an E-6 or E-7 who has been a 91G for only a brief period of time. All too often, he is not as experienced or as competent "clinically" as the soldiers under his "supervision". The younger 91G, on the other hand, leaves the service at the point s/he starts to become a real asset to the clinic. The turnover in the 91G MOS is incredible. Our present retention rate has been between 12% and 15%. There now exist 1227 91G slots in the Army, and this year alone the Academy of Health Sciences is scheduled to produce over 640 new 91Gs just to keep these slots filled. Over half of the 91Gs in the Army will be new this year!

The paraprofessional is well entrenched in the Army's mental health delivery system and for all practical purposes his continuance is beyond question. I personally feel, however (and this is my personal opinion), that the present state of affairs is far from ideal, and in some instances is far from acceptable. The existing situation demands readily available, in depth, professional backup.

We as the supervisors must be concerned with the appropriateness of the services provided by our behavioral science specialists. Furthermore, we must be continually concerned with the development of their knowledge and skills. It certainly is not my place to tell you how to do this, but my guess is that if you supervise once a week, in a group setting, this is not nearly enough. Likewise, if your inservice training is only once a month, or even only once a week, you probably need to re-evaluate. You must also ensure that the inservice training is relevant to the 91G's work and the work you need him to do. It must also be presented at a level that is meaningful to him/her. Supervision by the professional staff (and I stress professional staff) must be the highest priority if the system is to provide adequate and ethical services. I urge all of you who are involved in clinical types of work to evaluate your system of supervision and your inservice training. Unfortunately, to improve these areas, you may have to decrease other pursuits that you find more enjoyable, more interesting, more fulfilling, and perhaps less threatening.

NEW DIRECTIONS

The Academy of Health Sciences, and we at the 91G Branch of the Behavioral Science Division as "gatekeepers" to the MOS are also doing what we can to improve the behavioral science specialist's functioning within the mental health care delivery system.

First of all, the entire course itself is being modified. Although the Academy is not a TRADOC school, under the direction of General Pixley it was decided to adopt their model of Instructional Systems Development or ISD. The Directorate of Training, Development and Evaluation was established to implement this (I might add that a good deal of the working staff were psychologists).

The ISD model is carried out in five phases. Phase I involves analyzing the job. Questionnaires were sent out to collect information on what 91Gs do. Feedback was also received on what they should be doing! After collecting an inventory of job tasks, they are divided into two groups: those selected for instruction and those not selected for instruction. Performance standards or "How well must the 91G perform the job" are determined for each task selected for instruction. The final step in the analysis phase is to determine the most suitable instructional setting for each task. That is should it be trained in school, on the job, or does it require an interaction between training and career progression.

Beginning with Phase II, the ISD model is concerned with designing instruction. This obviously is done by using the job analysis information from Phase I. The first step is the conversion of each task selected into a terminal learning objective, i.e. what the student must be able to do to complete the training; in what situation or under what condition he must perform it; and a standard on how well he must perform it. Each terminal objective is then analyzed to determine the intermediate objectives and steps necessary for mastery of the terminal learning objectives. The steps for learning the task are ordered sequentially. The Individual Task Analysis Worksheet you have before you is an example of this part of Phase II (talk about ITAw). Test items to measure each learning objective are developed.

Phase III is the instructional development phase. The development phase refers to the actual preparation of instruction. Determinations are made on how the instruction should be packaged and presented to the students. In what kinds of activities will the students engage? Will it be didactic, experiential, video-tapes, etc.? What is the exact content of the lesson plans? Phase III terminates with a procedure for testing and evaluating the instruction to insure its performance meets expectations. The 91G course - or I should say the future 91G course - was contracted out to a civilian firm, Allied Sciences Associates. This is the firm that did the TRADOC work. They have a deadline of 1 year in which to deliver their work.

Phase IV is the implementation phase. Two important steps highlight Phase IV: that of training the staff in the procedures and problems unique to the specific instruction; and two, actually bringing the instruction on live and operating it.

Phase V is the control phase. Evaluation and revision of instruction are carried out. This is done preferably by personnel who are neither the instructional designers nor the course managers. There is both an internal and an external evaluation. The internal evaluation occurs first and is the analysis of the student's performance in the course. It determines instances of deficient or irrelevant instruction. Solutions are then offered. In the external evaluation, the actual on the job performance of course graduates is examined. Finally, all the collected data, internal and external, are used as a quality control on instruction and as input to course revision.

Also, in response to the survey and analysis of the actual tasks performed on the job, the 91G course is being elevated from a 10 level to a 20 level course. This in essence means that instead of turning out a basic intake interviewer, the entry level into the MOS will be that of a basic counselor. In spite of this, however, I do not think it would be reasonable to expect graduates to display a very high level of counseling skills. I believe there are at least two reasons for this. One is that obviously the length of training will not be extensive by professional standards. More importantly, however, being therapeutic requires a certain level of personal development and an openness to others. We cannot teach these directly, and in most cases, due to the concerns of attrition rates, difficulties in evaluation and the constraints of reasonable expectations, we cannot control for this important variable. The student will, however, at least be more extensively instructed and trained than those now graduating as 91G10s. Hopefully, at least, he/she will have the basic information and tools to accelerate his/her growth as a counselor.

In an effort to hasten this process, we in the 91G Branch have taken it upon ourselves to write approximately twenty nine hours dealing with counseling techniques and counseling skills to fill in this gap in the 91G training prior to the official implementation of the modified course (the exact date of implementation is unspecified at this time).

In an attempt to improve interviewing skills, we have also replaced the two week field placement with an in-house Intensive Interviewing Workshop. In the past, students were sent out to mental health agencies or quasi-mental health service agencies to gain actual on-the-job training and experience. All too often, however, their experience involved little actual interviewing of clients. (In one instance, students spent two weeks handing out grapefruit for the Salvation Army). When interviewing was carried out, often the agency desired a different format of interviewing and data presentation. The Intensive Interviewing Workshop is a two week, in-house experience, during which the students get continuous training in interviewing. This involves actual interviews, observing interviews, and writing these interviews up. Although no actual clients are used, staff members play roles such as "the hostile client" or "the schizophrenic client", in an effort to expose the students to a wide variety of client problems. Video tapes are used both for student feedback (i.e. they see themselves doing interviews), and to allow them to observe professionals at work with actual clients. The Intensive Interviewing Workshop not only gives the student more interviewing experience but allows more branch control over this experience. The preliminary data both in-house and from the field shows this innovation to be paying off.

One of the areas where there has been a good deal of dissatisfaction from the 91Gs and their supervisors is in the area of drug counseling. In an effort to ameliorate this situation those students going overseas (many of whom go to drug and alcohol jobs) are now going to be sent to the USADART Course. (U.S. Army Drug and Alcohol Rehabilitation Training), directly upon graduating from the 91G Course and prior to reporting overseas.

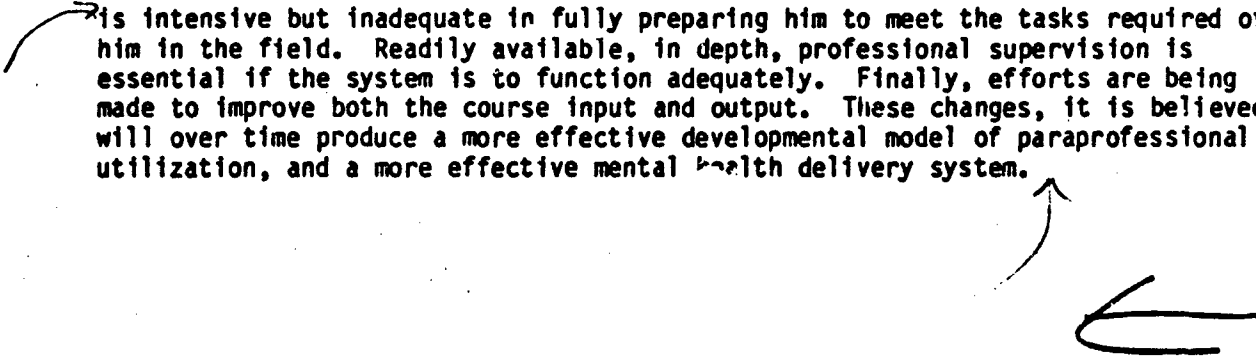
Also, in an effort to improve the knowledge and functioning of the students, a special text called Behavioral Science Specialist has now been completed (after 8 years) and is given to each student who enters the course. Its content not only complements the program of instruction but goes beyond what is required. It is not an attempt to be a comprehensive text-book (i.e. it does not present all points of view on all subjects or cover all the tasks carried out by the Behavioral Science Specialist), but it is a useful desk reference for the specialist on the job as well as the student. It not only can assist the individual with his daily work but will aid him in preparing for the SQT. A copy of this text has now been sent to all 91Gs in the field. I might add it would be a useful reference when looking for in-service training topics. You could even have your 91Gs in charge of presenting the material (this would not only help them learn the material, but would give them experience presenting material, a skill they will need as NCOs.)

Finally, we have not only tried to improve the course, and the abilities of the Behavioral Science Specialist who comes to you from it, but we have had some success with upgrading, in certain respects, the quality of the students entering the course. Common sense, subjective observation and now objective data indicate that the brighter and better educated individuals do better in our course. In line with that, we were successful in upgrading the minimum ST required to qualify for entry into the course from 100 to 110. It is also now a requirement for the individual to actually have a high school degree, not a GED or its equivalent. The thinking behind this was that in general the individual who was able to endure the stress and anxiety of high school would be a more mature individual than one who did not. In line with this, a request was made, and verbally granted by MILPERCEN, to increase the emphasis on attracting individuals who were on their first re-enlistment for entry into the course. This was seen as not only obtaining an older more mature individual but also as increasing the chances of a smaller turnover in the 91G field, since many of these people are career oriented. If this in fact is the case, we should have a more solid NCO corps, which would be able to take over some of the lower supervision themselves. Such a set of circumstances would bring the Army's mental health delivery system into line with the preferred developmental model of para-professional utilization.

SUMMARY

Recapping briefly. The Army is still basically an organization of people with a demand and need for human services. The Behavioral Science Specialist is found working throughout this human service delivery system. His/Her training

is intensive but inadequate in fully preparing him to meet the tasks required of him in the field. Readily available, in depth, professional supervision is essential if the system is to function adequately. Finally, efforts are being made to improve both the course input and output. These changes, it is believed, will over time produce a more effective developmental model of paraprofessional utilization, and a more effective mental health delivery system.

Two handwritten arrows are present. One starts at the top left of the text block and points towards the word 'is'. The other starts to the right of the text block and points towards the word 'Finally'.

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13-17 November 1978, William Beaumont Army Medical Center

THE REACTION OF ORGANIZED PROFESSIONAL PSYCHOLOGY TO THE MENTAL HEALTH PARAPROFESSIONAL

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There has been a trend toward the use of paraprofessionals in the area of mental health service since the late fifties and early sixties. The impetus for the trend has been the increased demand for mental health services occasioned by an increased awareness of psychological problems and the establishment of Community Mental Health Centers as service agencies. Albee (1959), writing for the Joint Commission on Mental Health and Illness, predicted that future mental health service needs would far outstrip the service delivery capabilities of the mental health professions. Subsequently, the Joint Commission recommended that "in the absence of more specific and definitive scientific evidence of the causes of mental illness, psychiatry and the allied mental health professions should adopt and practice a broad liberal philosophy of what constitutes and who can do treatment" (p. 61).

Psychologists at all levels have acknowledged the validity of Albee's manpower projections and a great number have endorsed the development of a paraprofessional work force as a possible solution to future shortages. However, no organized and comprehensive research and development projects have been forthcoming from the professional establishment. This is not to suggest, however, that the manpower projections were without impact in the mental health field.

Following the Final Report of the Joint Commission, there appeared a proliferation of innovative programs. The concept of the therapeutic community became a practical reality as existing hospital personnel within inpatient settings previously relegated to custodial care functions were acknowledged as potent agents of change and rehabilitation. Similarly, outpatient mental health facilities turned to previously untapped segments of the manpower pool, utilizing nonprofessionals with a variety of backgrounds and non-traditional qualifications as counselors. However, the widespread use of paraprofessionals in mental health care proceeded in a most haphazard fashion. Program innovations reflected the individual needs of the initiating agency and conformed to no broader set of guiding principles.

It is perplexing that despite early predictions of manpower shortages and subsequent realization of these predictions, a comprehensive program for the

The authors wish to thank Mrs. Patricia Malone for her assistance in the preparation of the paper

utilization of mental health paraprofessionals has not been undertaken by professional psychology. Matarazzo (1971), reflecting on this situation, predicts "A future historian or sociologist of the professions may be fascinated by his discovery of the professionals' slow-paced, decades long diagnosis and search for solutions and the concurrent hundreds of haphazard, uncoordinated, community-initiated, seat-of-the-pants solutions to equal numbers of critical local mental health manpower shortage problems" (p. 363).

The failure of professional psychology to embrace the paraprofessional movement has been widely attributed to reservation by professional practitioners regarding the quality of service provided by paraprofessionals and to a defensive reaction by professionals to intrusion by a competitive paraprofessional work force. However, the present writers contend that these issues of competency and defensiveness are more the product than the cause of professional psychology's posture. The following paragraphs will discuss these issues of competency and defensiveness and comment on the roles attributed to them in psychology's reaction to the paraprofessional movement.

CONCERN FOR COMPETENCY

Concern for competency is a legitimate issue in the development of a new health care work force. However professional psychology has not responded to the issue with unified programs to evaluate and ensure competency. Instead, programs of selection and training have developed independently, guided by the needs, resources, and philosophies of specific mental health care settings.

Selection criteria have been the subject of much speculation. Many writers have emphasized the selection of paraprofessional mental health workers indigenous to the target population or community served. The rationale for this emphasis has been that indigenous persons will have an understanding of problems and a rapport with the community that professionals do not have. This notion has substantial intuitive appeal and is especially endorsed by directors of community outreach programs (Bartels & Tyler, 1975). Related to the criterion of community affiliation is the criterion of the presence of certain interpersonal qualities. This criterion is based on the premise that certain individuals have a natural endowment of the necessary and sufficient conditions for therapeutic interactions. In a survey reported by Bartels and Tyler (1975) the desirable qualities for paraprofessionals listed most often by Community Mental Health Center directors were interpersonal facility, a stable and mature personality, education and intelligence, and interest in human service. However, of these qualities, only education and intelligence differentiated between satisfactory and unsatisfactory ratings of paraprofessional work. Thus, while therapeutic interpersonal qualities are generally endorsed as a desirable selection criterion, education and intelligence emerge as critical factors.

Paraprofessionals have received training historically through OJT conducted within employing agencies and more recently through college programs offering AA and BA degrees in mental health. Agencies employing paraprofessionals have used a variety of OJT modalities including didactic lectures, observing and modeling professional and paraprofessional staff, and supervision. The content of the OJT varies among settings. However, there is some consistency in the use of

training packages which focus on the development of relationship building skills (Carkhuff, 1969; Danish & Hauer, 1973; Ivey, 1971; Kagan 1972). These training programs have in common a basis in the Truax and Carkhuff (1967) elaboration of the "necessary and sufficient conditions" posited by Rogers.

Within the college programs, there are two general training philosophies. One approach may be labelled a limited specialist model in which students receive intensive training in circumscribed skills areas, such as psychometry, behavior therapy, psychological research, group facilitation, and alcohol and drug counseling to name a few possibilities. The second approach may be labelled a generalist model is unrealistically broad and teaches no specific skills. What is needed is a hybrid model which provides some unifying, underlying background while teaching skills in specialty areas.

Despite the apparent heterogeneity in selection and training procedures, surveys of paraprofessional use (Bartels & Tyler, 1975; Sobey, 1970), and reviews of the paraprofessional literature (eg. Durlak, 1971) indicate a generally positive evaluation of paraprofessionals mental health workers. Nonetheless, the widespread use of paraprofessionals in the absence of uniform training guidelines contributes to a substantial variance in qualifications and performance. Thus, concern for quality of paraprofessional mental health workers appears to be more a consequence than a cause of psychology's uncoordinated efforts.

DEFENSIVENESS

A defensive response by psychologists to the intrusion of paraprofessionals into their domain of practice is consistently cited as a primary obstacle to professional acceptance of the paraprofessional movement. However, it seems unlikely that psychologists would construe the positive reception extended to the paraprofessional work force as a direct threat to the professional practice of psychology. Indeed, most responsible psychologists have acknowledged increasing service requirements. The burgeoning paraprofessional work force is testimony to its acceptance within a variety of mental health settings. Moreover, there is no data to suggest that professional psychologists are being displaced by paraprofessional surrogates. It has even been suggested that the growth of the paraprofessional movement calls into question the value of traditional credentialing and even casts doubt on the value of traditional psychotherapy. This position also seems extremely naive and ignores the management role of professional psychologists. Paraprofessionals function very well in a variety of capacities, and may in some cases possess inherent socio-cultural or personality attributes which make them particularly effective with certain populations or behavior domains. In most cases, however, the broad based education and clinical skill of the professional are necessary to direct such paraprofessional activities.

The present writers propose that the emphasis on professional defensiveness actually represents a response to the difficulties produced by a lack of clear paraprofessional-professional role demarcation. The absence of broadly

organized programs to guide paraprofessional training and utilization has contributed to considerable confusion regarding the role of the paraprofessional. Several writers identify role confusion as a significant obstacle to a successful coalition between paraprofessional and professional mental health workers. The isolated and idiosyncratic evolution of paraprofessional use has resulted in a great diversity of paraprofessional roles. A survey of 86 Community Mental Health Centers conducted by Bartels and Tyler (1975) revealed that with the exception of conducting psychological evaluations and prescribing medication, paraprofessionals engage in virtually all of the activities that the professional staff do. Paraprofessional reactions to this role dilemma range from apology to defensiveness. The dynamics of the relationship between paraprofessional and professional can become one of hostile-dependence in which the paraprofessional is at once dependent upon and resentful toward the professional.

An additional difficulty deriving from unclear paraprofessional role definition is the absence of an established career ladder or lattice. Presently, the only clear avenue of upward mobility available to the paraprofessional is to leave the paraprofessional ranks and seek professional status. Similarly, idiosyncratic patterns of preparation and utilization impede the lateral career mobility of the paraprofessional. These career limitations must impact on the job satisfaction and eventually on the quality of the paraprofessional work force. Only those workers content with ill defined roles and limited career mobility will remain. We could be faced with a Catch 22 situation, wherein if an individual is willing to work in the paraprofessional setting, we don't want him.

The professional is also affected by paraprofessional role confusion. In the absence of clear paraprofessional role definition, professionals tend to operate with inconsistent expectations. The proficiency of paraprofessionals in specific areas and the ever increasing service demands may contribute to unrealistic expectations and subsequent dissatisfaction on the part of professionals.

The issue of defensiveness as a cause of psychology's posture paraprofessionals appears to represent a variety of difficulties deriving from unclear role definitions. Moreover, these difficulties appear to be largely a product of rather than the impetus for the failure of professional psychology to provide guidelines for paraprofessional training and utilization.

CONCLUSION

→ The preceding discussion suggests that the widely cited issues of concern for quality and professional defensiveness are inadequate explanations for organized psychology's failure to embrace the paraprofessional mental health movement. Indeed, these issues seem to be not a cause of psychology's posture, but rather the result of psychology's failure to coordinate paraprofessional training and utilization. The present writers propose that psychology's neglect of the paraprofessional movement may be more accurately attributed to psychology's preoccupation with its own professional definition. ↘

Professional definition is an issue which has confronted psychology throughout its history. Recent developments in the issues of parity with psychiatry and inclusion under national health insurance have further intensified concern with professional definition. Witness the proliferation of articles addressing the history (McKinney, 1976; Shakow, 1978), definition (Atkinson, 1977; Shakow, 1976), and professional practice (Olson, 1978; Peterson, 1976) of clinical psychology. This preoccupation with professional status has precluded psychology's attention to the paraprofessional movement. Paradoxically, however, psychology may be neglecting a potentially powerful asset to its professional definition.

There is increasing recognition by those who shape national health care policy that the paraprofessional movement offers a solution to increasing needs. Psychology could capitalize on this recognition by defining the development and management of the paraprofessional work force as falling within its professional purview. In this manner, the paraprofessional movement could become a central feature of the domain of professional psychology rather than a frustration necessity or a competing influence. If psychology fails to act, the initiative may be adopted by non-professional organizations serving the public interest. A case in point is the activity of the National Association of Mental Health, the country's volunteer mental health organization, in the development of the mental health paraprofessional movement. Psychology is in danger of losing input into the future development of the paraprofessional mental health work force.

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THE EXPERT WITNESS - CLIENT OR THERAPIST?
OR, A PHENOMENOLOGICAL APPROACH TO PRACTICAL PSYCHOTHERAPY

Stephen T. Lifrak, Ph. D.

Dr. Lifrak spoke on an effective way of intervening in psychotherapy - both for the client and the therapist. He has named this therapy "process therapy", and he suggests it to be effective within the military for a number of reasons. Among them are: a. It is a practical therapy yielding practical results. b. Process therapy is devoid of psychologese and labels - both of which result in resistance by military personnel. c. Process therapy was developed from experience in a military environment.

What is successful in therapy? A review of the research offers some clues to necessary conditions for effective psychotherapy. Brown and Bernstein suggest conviction of the therapist is important i.e., the therapist (T) who is highly invested in his approach is more effective. Rogers provides three points: counselor real or genuineness, involvement by the client in the process, and the client is the authority concerning himself. Beverly Gomes-Schwartz found the factor which most consistently predicted outcome was patient involvement. Dr. Lifrak noted the therapist needs to allow the client to be the expert in therapy, and he indicated the massive sales of Dyer's ERRONEOUS ZONES is an indication of individuals' desire for involvement as well as willingness to take action.

In developing the process model, Dr. Lifrak looked at the world of the client, the world of the therapist, and the object of therapy. Observation drawn from the world of the client included: a. Needs are a driving force and as such are a focus of therapy. b. The client is the expert therefore the therapist checks out his conjectures with the client. c. The client takes responsibility for actions. Indeed, ultimately, the client is alone in any decision he makes. Further observations included the critical nature of the energy system for the client's functioning. This stems from a view that the energy system is closed and a balance is achieved between emotional issues and needs. A primary issue for clients and the therapeutic process is self-need satisfaction. A person who has his needs met is free to meet the needs of others. Finally, Dr. Lifrak notes that our myths cause inaccurate perception of self, others, and the world.

While the client functions from his world, the therapist is functioning from his own. It is appropriate for the therapist to facilitate awareness of needs of the client by the client. Letting the client know the therapist is not God is viewed as important also. An appropriately therapeutic therapist will also

develop trust in therapy, be real or genuine, and avoid "burn-out". This last can be facilitated by the therapist's belief that he is not God and does not have to be either.

Objects of therapy include: a. Developing an opportunity for the client to become more aware of self, b. Letting the client see options that can lead to more efficient behavior, c. Allowing the therapist to be real and human, and d. Having the client develop responsibility for himself and his actions. These four points then lead to the use of methods and techniques which are consistent with them. The over-all goal of therapy is that of increased effectiveness by the client in meeting his needs. Dr. Lifrak noted change of personality in the client is not an appropriate goal of therapy.

Several process elements were discussed during the presentation. The medical model was described as unhelpful, and was noted as dehumanizing. An effectiveness model was said to be more appropriate. Dr. Lifrak suggested morals and values be set aside until the client understands the dynamics of his needs; the therapist avoids being a judge. When the therapist forms ideas or makes conjecture, it is better to communicate from the client's reference. It is also appropriate to verify conjecture via data collection.


Action is a critical variable in the therapy process. Insight is not sufficient for change. Action is used to: verify conjecture, form an experience base, help the client understand his needs and to develop options, allow for emotional learning that can occur only through direct experience, and provide a means for checking accuracy of myths. The therapy process also diminishes perceived risk for the client. Past experience is important in terms of present feelings of the client.

The additional process factors were discussed by Dr. Lifrak. The therapist may use a "good week" as an indicator of strength, need satisfaction, and effective behavior for the client. In this, system, the therapy session is a stopping-off point. Increased effectiveness takes place outside the therapy session; the client has continued involvement. Finally it is the understanding that emerges from thought, feeling, and action that is the key to effective living.

Several points were noted as outcome of process therapy. The client is the source of data to demonstrate effective functioning. A global indicator of successful outcome occurs when the client says "I don't need you - I can do it myself - I have the tools". Three measures of improved functioning for the client are: a. less ineffective behavior (Dr. Lifrak pointed out it is never absolutely complete.), b. the client gets out of ineffective behavior more quickly than in the past, c. the client gains a developmental attitude. Two final points for outcome were mentioned by Dr. Lifrak. Knowledge of growth is not an "Aha" phenomenon - it often comes after the fact of behavior. Lastly, the client does not worry about being or going crazy.

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COMBAT PSYCHOLOGY: THE ROLE OF THE DIVISION PSYCHOLOGIST IN TIME OF WAR



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This paper presents a conceptual framework for the role of a U. S. Army Division Psychologist in the combat environment. The U. S. Army has no precedence for this as Army Medical Department psychologists have never served as an integral part of a troop unit in combat. During World War I, the first commissioned psychologist, Major Robert Yerkes, was in the Sanitary Corps (Seidenfeld, 1966). Throughout WW I and WW II psychologists were primarily involved in the personnel selection process (Glass and Bernucci, 1966 and Glass, 1973). Toward the end of WW II psychology began to join psychiatry in patient care and clinical evaluation but not in combat areas (Seidenfeld, 1966).

The role of clinical psychology as it related to combat in the Post-Korea era still reflected the adjunct position psychology assumed under psychiatry. Psychiatrists and enlisted technicians were assigned to TOE combat units but not clinical psychologists (AR 40-216, 1959). The role of clinical psychologist is not mentioned until the theater operations level is described or CONUS.

The primary role of clinical psychologist in Vietnam involved either research or clinical duties with non-combat medical units (and in most cases associated with substance abuse). It was not until the 1970's (and after Vietnam) that clinical psychologists were officially assigned as TOE members of the Division Medical Battalion.

Most papers discussing issues of role clarification for mental health professionals working in combat units address concepts of prevention, education and consultation (Babad & Solomon, 1978; Bey & Smith, 1971; Greenbaum, Rogvsky, & Shalit, 1977). These authors perceive the behavioral scientists role as preserving the fighting strength through stress reduction techniques. Post-Vietnam analysis of the adjustment of combat veterans suggests that this role could prove beneficial (Figley, 1978; Strange, 1974; Worthington, 1976, 1977).

CONCEPTUALIZATION

This paper is based on my experiences as a combat infantryman (as an NCO, company and field grade officer) and as a military mental health professional and researcher. The basic premise for this role conceptualization is found in community mental health models of prevention, consultation, education, group and organization theory. Successful employment of these techniques presumes that

the combat psychologist possesses an intimate knowledge of the Divisions make-up (i.e. combat, combat support, and service support units); its mission, organizational structure, tactical capabilities, combat readiness posture and contingency operational areas. The remainder of this paper will be presented in outline form to facilitate understanding.

MAJOR PHASES

This concept is presented from a total beginning to termination point of view. While recognizing that many Division psychologists may enter and leave while the unit is in only one or two stages, it is important to recognize and understand all phases.

I. PRE DEPLOYMENT: this is the time in CONUS (or a friendly overseas area) prior to deployment to the theater of operations (weeks to months).

II. PRE COMBAT: This time begins upon arrival in the theater of operations and terminates when the unit is committed to a combat mission (weeks to days).

III. COMBAT: This time phase involves commitment to and deployment in combat operations (days, months or years).

IV. POST-COMBAT: This phase begins after combat operations have ceased but prior to leaving the theater of operations (days to weeks).

V. RETURN TO CONUS: This phase is initiated when the unit prepares to leave the theater of operations and extends through arrival in CONUS (or return to a friendly overseas area).

THE ROLE OF THE DIVISION PSYCHOLOGIST

- PHASE I:
- a. Become acquainted with Division units, strengths and weaknesses.
 - b. Attend to potential family problems.
 - c. Present classes to unit leaders and members on separation from family, combat stress, coping, adjustment and treatment.
 - d. Provide basic mental health training (i.e. evaluation and counseling) to combat medics and chaplains.
 - e. Initiate mental health follow-up program (referral sources and contacts) for dependents who will remain in area after the Division departs.
 - f. Monitor the mental health of the Division.

- PHASE II:
- a. Attend to adjustment problems in overseas area and visit units.
 - b. Continue with training of medics and chaplains; expand the mental health network.
 - c. Educate Division personnel on problems of stress related to combat.
 - d. Keep the leaders informed on potential stress reactions or problem areas.
 - e. Assist commanders in dealing with adjustment problems.

- PHASE III. a. During offensive combat stay out of the way.
b. During defensive combat continue mental health prevention and care.
- PHASE IV. a. Treat psychiatric casualties.
b. Assist units (personnel) deal with traumatic experiences; help them to adjust and cope.
c. Assess mental health and coping skills of various units; provide feedback to unit commanders.
d. Continue training with mental health network (i.e. medics, chaplains, etc.).
- PHASE V. a. Prepare Division personnel for reunion with families regarding separation shock and homecoming.
b. Discuss potential leadership-management problems with commanders.
c. Monitor Division mental health status.
d. Educate Division personnel on potential readjustment problems associated with their return.

CONCLUSION

→ This paper was developed to establish a theoretical framework for the role of the Division psychologist in combat. It is based on the author's own experiences and the experience of other behavioral scientists who have provided mental health services to combat units. At this time AMEDD psychologists have no history in this area. Hopefully this paper will provide some assistance for Division psychologists in preparation for the possible contingency of combat. ↗

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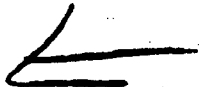
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ISSUES OF CONFIDENTIALITY FOR ARMY PSYCHOLOGISTS

Robert C. Hulsebus, Ph.D.

The discussion covered a wide range of issues involving confidentiality and the protection of psychologists' records. The fact that Army psychologists have dual responsibilities - both for their clients' welfare and for the welfare of the military units as well was acknowledged. The applicability of the Ethical Standards of Psychologists (APA, 1967) were discussed in light of the dual responsibilities of military psychologists.

There was a review of the statutory safeguards related to client or patient privacy which exist in the Army Health Record System (AR 40-42, AR 340-17, AR 340-21-9). The procedures which are to be followed before information can be released from psychologists' records were presented.

1. To the individual if he requests the information, or to others he designates by specific written authorization.
2. To others requesting information about the client without his knowledge or permission with the following conditions met.
 - a. The inquirer has to present identification and to demonstrate an official need to know.
 - b. The determination of an official need to know rests only with the medical treatment facility commander or his designee, the Patient Administration Division office.
 - c. If the request is found to be justified, the person making the request is required to make a specific written request on DA Form 4254-R (Request for private medical information).
 - d. This request will specify the name of the individual, the official reason for the request, and the specific information sought.
 - e. Thus, requestors are not allowed to ask broadly based questions about the patient's record, and they are not to be allowed to read the record themselves. The psychologists and the PAD Officer are to act as filters of information.

The Army Alcohol and Drug Abuse Program was described as having different and more stringent controls on the release of information on individuals (AR 600-85). The increased controls were shown to be exerted over release of information with and without the client's consent and information releasable under court order.

Next, the requirements for psychologists and other health related professionals to screen and report individuals who are in chemical or nuclear surety MOS's were discussed (AR 50-5, 50-6).

The second part of the presentation dealt with types of situations not specifically covered by regulations. Such situations where individual professional judgments were called for offered greater opportunity for discussion by those present. The first issue was the extent of protection of records on children who had been tested or who were in therapy when parents expressed desires to find out the contents of their children's records.

The second type of situation centered about whether or not to inform a client if his records are requested or required by an investigative agency. The third area concerned the psychologists' responsibilities when he believed that violations of the law may have occurred at the hands of his client.

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"I'LL NEVER CALL YOU DOCTOR":
AN EXERCISE IN COGNITIVE DISSONANCE

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In his closing comments on solving community entry problems by the clinician Nottingham (1975) states "You could have been a steeplejack or a chiropractist, but you chose community psychology. So, having made your bed, rest ye well. The nightmare and the morning, commeth" (p. 309). Similar choices and responsibilities are not foreign to those mental health clinicians who have ventured into nontraditional areas for delivery of services. This is logical and appears quite simplistic on the cognitive level. Yet, the "nightmare" appears as a more pressing issue for those mental health clinicians in the U.S. Army who sometimes venture, sometimes fall into and yes, sometimes choose non-traditional settings for the delivery of services. As an example, I refer to the Division Mental Hygiene Consultation Service, specifically, of the 82nd Airborne Division located at Ft. Bragg, North Carolina.

The author of this paper was originally requested to present an overview of the problems of such an organization as if to imply that they would be different and unique, which again seems like a logical statement. The every day, ever present and visible testimony of the preparedness to go to war in a moments notice alone creates differences along physical, intellectual and emotional dimensions for the members of this unit. But it too, like a MEDCEN or MEDDAC, has an organization and a structure with some policy, standards and principles to achieve outcomes and missions. And as Nottingham suggests, a clinical psychologist having made the choice to work in this Divisional setting, should live with it and make the organization or structure work for him/her. Quite logical again, until the "nightmare" suddenly evolves and then the challenge begins.

The focus of this presentation therefore will not be a challenge of or a presentation of alternates to the existing system of MHCS within the Division. Rather more basic issues of survival and belongingness are addressed with consequential attitude changes and problem solving strategies provided.

The creature comforts of a MEDCEN were my initial experience base as a new clinician in the field of psychology. Yet, I was continually aware of other places less attractive which I actively sought as part of an overall career progression plan (or as some say, to pay my dues). Therefore the choice. The "bed" began to be made in jump school with the intent of becoming the new Division Psychologist for the 82d, bald-headed and bear-lipped I attempted to do what some say is intended for birds and fools. Sustaining an injury, I was

relieved to be sent to Ft. Bragg where I later might become jump qualified and immediately get down to the business of psychology. The "nightmare" was interrupted....I thought.

A look at my new work environment. Huge, active, bustling, and noisy with maroon berets everywhere....Sounds of combat boots uniformly striking the hard asphalt in a four-mile run to the cadence of a deep-throated sergeant gruffly shouting "If my mail don't open wide..." The interruption of six or so C-130 troop transport aircraft at 500 foot altitude and several volleys of fire nearby prevented me from taking this chant too seriously. Eventually...on to meet what I later came to realize was the first in a long line of "bosses" I was to have in the Medical Battalion...the XO (others were the Division Psychiatrist, the Battalion Commander, the Division Surgeon and to a lesser extent, the Company Commander of the headquarters and Support Company).

When I walked into his office, little did I know that this interaction with the XO would be the start of a cognitive dissonance for me. His words were "I just want you to know Captain, that I run the staff here and you are part of the staff....Also, I'll never call you doctor." My gosh. I had heard about the different perceptions of mental health professionals within a unit of this sort but had calculated that it might be more subtle with the professional directing efforts at defining and delimiting a role and position in a diplomatic fashion. However this statement from the XO was quick, blunt and admittedly, somewhat offensive. My first challenge to professional integrity...or so it seemed. Seconds later I responded with "All the way, Sir" considering the possibility his statement may have had its basis in a historical unfruitful experience with a member of the mental health profession or a test to see how easily I would be unnerved. Regardless, this was the beginning. What was to follow, as seen in the experiences and actions as a mental health professional in this Division, was a multiplicity of this interchange with the XO in principle.

With this brief entry description, I would like to focus and highlight certain impacts on the delivery of mental health services within the 82 Airborne Division followed by quite tentative prescriptions for those that might enter such a system in the future.

Organizations are comprised of basic common elements of people, resources, purpose and structure. What seems to differ from organization to organization is the degree of overlap among these categories. Certainly, some degree of shared interchange is necessary for the organization to function effectively with more complexity in the system creating greater likelihood of overlap. Additionally, these elements themselves do not exist in a vacuum; they too are a part of a larger microsystem which impacts on it. Therefore, overlap is crucial.

Consider the 82d Airborne Division to be a complex microsystem. It has its structure (the traditional wire diagrams), people (airborne qualified personnel across a wide range of MOSs), resources (weaponry, machines, paper, etc.) and mission. The latter deserves more detail. Simply stated, the mission is to be prepared to go anywhere in the world at a moments notice and with the capability

THE MISSION. The MHCS of any Division had two kinds of missions...that for peacetime and that for wartime or combat. To accomplish the latter, the guiding principles for MHCS are and would be akin to those of other medical operations during war, i.e. immediacy, proximity and expectancy, or to treat as soon as it happens, where it happens, and with the notion of returning personnel to the mission if possible. In combat, the Medical Battalion of the Division, with its Clearing and Ambulance platoons and supporting elements, is one of the earliest echelons of medical treatment and disposition. MHCS, as part of the Medical Battalion, becomes involved in a triage process where, depending on the Commander's evacuation policy, patients are given an expedient disposition keeping the three principles in mind. For MHCS, some dispositions may involve bed rest and food for 24 hours for combat fatigue to injections of thorazine with possible evacuation to the rear to ventillation of depressed feelings. Fast and furious is the name of the game. Other activities of the Medical Battalion also affect the wartime operation of MHCS. The 91-G Behavioral Science Specialist may be utilized as a 91-G medic in the case of a mass casualty or as permanent or temporary perimeter guards in foxholes. A remote possibility is that the Division Psychiatrist, Psychologist or Social Worker might consult with other elements in the chain of command if there is time and accessibility to these individuals and units.

The peacetime/garrison mission of the MHCS provides an opportunity for slightly more definitive treatment to take place. Often times I have witnessed the Division Psychiatrist refer to our mission in garrison to be "wartime psychiatry" and we are doing very closely in peacetime what we would be doing in combat. In some sense this is accurate. The majority of our patient activity ranges from the toxic psychoses as a result of drug ingestion (e.g. PCP) to the depressed person who makes a suicidal attempt or gesture to the angry passive aggressive young trooper who has a long history of problems with authority figures (a true neurotic rarely presents for treatment). If a patient is seen longer than 4 or 5 times, something in the system may not be functioning properly, primarily due to the emphasis placed on a crisis intervention model aligned with the principles mentioned before. A soldier in garrison with the 82d is continually engaged in some sort of mission readiness and therefore long-term treatment could mean a loss of badly needed mission resources.

One last point with respect to the peacetime mission of MHCS, i.e. there is an overlap with the other peacetime missions of the Medical Battalion. To cite a few examples:

- (1) ARTEPs and field exercises both local and extended geographical.
- (2) IGs
- (3) Motor pool activity
- (4) NBC proficiency and training
- (5) Airborne operations
- (6) Weapons qualification

On the average, a least one member of the MHCS staff or personnel is on an airborne operation once a week which means the loss of one complete day.

to respond in a combat environment with the maximum amount of power. Implicitly therefore, in a non-combat posture, is the notion of constant preparedness and readiness...not testable once or twice a year (as in the usual ARTEPs) but every hour of every day. Now let us deal with the MHCS mission in this system.

THE MISSION. The MHCS of any Division had two kinds of missions...that for peacetime and that for wartime or combat. To accomplish the latter, the guiding principles for MHCS are and would be akin to those of other medical operations during war, i.e. immediacy, proximity and expectancy, or to treat as soon as it happens, where it happens, and with the notion of returning personnel to the mission if possible. In combat, the Medical Battalion of the Division, with its Clearing and Ambulance platoons and supporting elements, is one of the earliest echelons of medical treatment and disposition. MHCS, as part of the Medical Battalion, becomes involved in a triage process where, depending on the Commander's evacuation policy, patients are given an expedient disposition keeping the three principles in mind. For MHCS, some dispositions may involve bed rest and food for 24 hours for combat fatigue to injections of thorazine with possible evacuation to the rear to ventilation of depressed feelings. Fast and furious is the name of the game. Other activities of the Medical Battalion also affect the wartime operation of MHCS. The 91-G Behavioral Science Specialist may be utilized as a 91-G medic in the case of a mass casualty or as permanent or temporary perimeter guards in foxholes. A remote possibility is that the Division Psychiatrist, Psychologist or Social Worker might consult with other elements in the chain of command if there is time and accessibility to these individuals and units.

The peacetime/garrison mission of the MHCS provides an opportunity for slightly more definitive treatment to take place. Often times I have witnessed the Division Psychiatrist refer to our mission in garrison to be "wartime psychiatry" and we are doing very closely in peacetime what we would be doing combat. In some sense this is accurate. The majority of our patient activity ranges from the toxic psychoses as a result of drug ingestion (e.g. PCP) to the depressed person who makes a suicidal attempt or gesture to the angry passive aggressive young trooper who has a long history of problems with authority figures (a true neurotic rarely presents for treatment). If a patient is seen longer than 4 or 5 times, something in the system may not be functioning properly, primarily due to the emphasis placed on a crisis intervention model aligned with the principles mentioned before. A soldier in garrison with the 82d is continually engaged in some sort of mission readiness and therefore long-term treatment could mean a loss of badly needed mission resources.

One last point with respect to the peacetime mission of MHCS, i.e. there is an overlap with the other peacetime missions of the Medical Battalion. To cite a few examples:

- (1) ARTEPs and field exercises both local and extended geographical.
- (2) IGs
- (3) Motor pool activity
- (4) NBC proficiency and training
- (5) Airborne operations
- (6) Weapons qualification

On the average, at least one member of the MHCS staff or personnel is on an airborne operation once a week which means the loss of one complete day.

- (7) Daily physical training
- (8) Officer and enlisted staff duty
- (9) Continuous updating of forms of personnel
- (10) Human relations training
- (11) Administrative meetings
- (12) SQT training
- (13) Other schools and training for EMs

What about Consultation which is supposed to be an integral part of the mission of any MHCS? A continual awareness exists on the part of the 82d MHCS staff of the need to perform in a consultative capacity as well as in the traditional patient care modes. Of necessity, the former has been restricted to case and consultee centered types of consultation interactions. The organizational effectiveness folks absorb more of the complex interventions at the organizational level.

THE STRUCTURE. The structure of the MHCS within the Medical Battalion is simple and designed keeping in mind the three basic principles of patient care as well as to insure that all aspects of medical care are mobile and self supporting as much as possible. This simple structure in actual function however displays a high degree of overlap with other functions or missions. Examples are:

- (a) Physically, the Division Surgeon is in the Medical Battalion although he is actually on the Division Special Staff. He is responsible for the professional aspects of medical care throughout the Division as well as the Medical Battalion. As part of this activity therefore, he is interested in the professionals who are rendering services to the Division. Input to the Division Surgeon by these professionals.

*There are those that would advocate co-locating the Division MHCS with the Department of Psychiatry and Neurology of a MEDCEN or MEDDAC during peacetime. Although several advantages might be raised for this decision, doing so might remove the MHCS too far from the actual activities of the division and therefore reduce an awareness for a sometimes austere environment that attempts to approximate a combat mission.

is crucial. However the Medical Service Corps officers and some of the Medical Corps officers are also considered to be part of the staff of the Medical Battalion and come under the responsibility of the Battalion XO.

- (b) The 91-G Behavioral Science Specialists are assigned to the Medical and Support companies within the Battalion. The same 91-Gs are also receiving supervision from the Division Psychiatrist who also may be a part of the rating scheme of these individuals.

- (c) The Division Psychiatrist position concerns itself with a dimension of influence coming from the hospital commander of the local MEDDAC who also happens to be the Corps Surgeon who has professional input and influence on the Division Surgeon.

With these few examples of the overlap in the structural elements between the MHCS and the Medical Battalion, it is clearly evident that one person's professional body or position comes under the scrutiny of several other persons and positions.

PERSONNEL: As indicated, all personnel of MHCS in theory belong to someone else in the Battalion. Control of professional issues concerning mental health are chiefly the responsibility of the Division Psychiatrist. Yet, reflecting on the multiplicity of the Medical Battalion's mission, a high degree of overlap exists between the professional activities that a member of the mental health team is responsible for and those activities that come from the Battalion which are also the responsibility of the member. For example, we are all well aware of the necessity for grooming 91-Gs after they have been assigned to us after completing their course at Ft. Sam Houston. A lot of effort and planning is constantly taking place to develop his/her skills to a level of minimum clinical expertise. Yet the 91-G in the Division MHCS (especially in the lower rank) is keenly aware and constantly reminded by their Company commanders of the need for promotion points or readiness requirements that are usually acquired through additional schooling or training in the Medical Battalion or at other locations. Therefore, there can be a considerable loss of time for the 91-G to provide services and certainly a degree of difficulty in planning ahead for a long period of time. If the Medical Company to which the 91-G belongs is preparing to go to the field, usually a 90% accountability of personnel within that company is required for that mission. The 91-G might be strongly encouraged to fulfill this mission requirement again creating some difficulty in patient services planning. Such a duality of missions for the 91-G create not only potential problems in patient care but also engenders a duality of perceptions as to the primary role of the 91-G, i.e. soldier/therapist. The staff of the MHCS contend that the 91-G functions quite differently than a 91-C or a 91-B in their respective settings. The latter two will treat patients as a part of a larger triage system and deal with the preliminary work and data gathering for the PA or physician. The 91-G, with supervision, is responsible for a specified number of intakes, diagnostics, dispositions and treatments for the patients. This necessitates advanced scheduling for this activity. Even more crucial is the fact that the primary medium for treatment in the MHCS is the relationship between the therapist and the patient; this is not easily altered or transferred when other missions of the Medical Battalion are to be met. As a result, it is sometimes difficult to keep company commanders informed, and more so, sensitive to the differences in patient care provided by the 91-G versus the 91-B or 91-C.

RESOURCES: The primary source of logistical and supply support for MHCS comes from the S-4 and the DMSO (Division Medical Supply Officer) of the Medical

Battalion. The problems that arise in this area are not so much a function of overlap with other elements within the system but rather a problem of priorities. If it is a request for stationary supplies, there does not seem to be any major delay but when it is a question of obtaining certain diagnostic instruments or resupplying forms, for these, a continual "squeaky wheel" principle needs to be enforced.

Support becomes even more elusive when considering more subtle issues which impact on the effectiveness of patient care (e.g., the comfortableness of patients in the waiting room and in the therapy rooms, the environmental setting of the building itself, appropriate temperature control*, freedom from noise interference and distraction**). One aspect of the problem is that MHCS is now the only occupants of an entire TMC building, which, for many issues of control and accountability, are under the local MEDDAC. Yet there is a grey area where the MEDDAC and the Medical Battalion overlap in responsibility for the MHCS operations (e.g. for some of the furniture, the MEDDAC is responsible; for IG inspections, the Medical Battalion is responsible; as of yet, no one knows or will admit who is responsible for the physical plant itself). The conclusion at times is confusion.

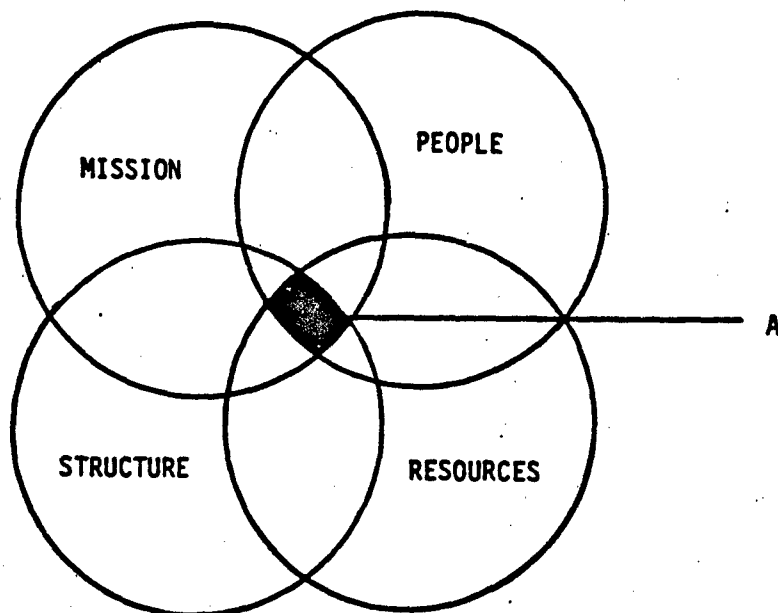
For MHCS the issues go on and on in the overlap of the dimensions of mission, structure, personnel and resources. At times, these issues seem as plentiful and new as days in a year. What has been related is but a sample of what can ultimately develop into frustration, if not blatant anger at times for the mental health professional despite the level of expectations and drive for the accomplishment of these.

What seems to take place in the developmental scheme of things for the newly arriving mental health professional in order to cope with the perceived frustration is to organize certain elements in an intellectual fashion to rationally understand a system that on occasion seems largely irrational. Furthermore, these conceptions have a tendency to be simplistic in design to arrive at a sense of control of matters. The following is such a conceptualization which I am certain is simplistic, reductionistic and does not afford much by the way of addressing the preparedness for the "nightmare". But it was the beginning of the resolution of the dissonance.

Using the traditional ven diagram approach, a system, with the basic elements of mission (purpose), structure (organization alignment), people (manpower) and resources (materials) with some necessary degree of overlap for minimum functionality, might be portrayed as such:

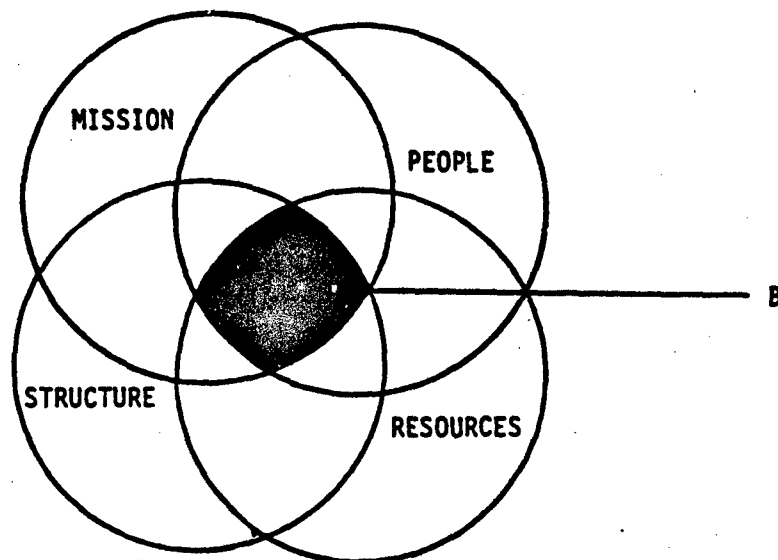
*This fall, the DAFE thought that MHCS building had been abandoned and therefore did not turn on the heat when all other buildings were.

**e.g. Tree-top C-130's and C-141's, helicopters, heavy machinery.



Assuming that the basic principles of permeability of or fluidity between boundaries are not necessarily fixed for each of the elements, and assuming that the size of the circle representing each dimension may, in reality, be different for each (depending on the idiosyncratic style of the organization's priorities), overlap does occur across all combinations. The amount of overlap "A" is an area for potential, "loss of identity" of an original dimension (M,P,R, or S) which may be attributable to a decrease in the level of effective communication or interchange. Similar overlap might occur between all combinations of the dimensions with the more combinations generating greater probability of confused messages.

A more complex organization (complex in one or all of its elements) might be pictured as such:



With the same assumptions, "B" compared to "A" would have an increased probability of confusion, frustration and more specifically "lost" or partially altered identity of a dimension that may or may not be determinantal.

If the entire ven diagram were to represent the Medical Battalion of the 82d, and if the MHCS were considered to be a part of each of the four elements of the system and if the structure is assumed to be complex (as in the description of "B" relative to "A") then some intellectual, cognitive grasp of the aforementioned issues facing the present MHCS has begun. For the new mental health professional in an organization of this type, such an approach might be viewed as the primitive beginnings of an attempt to resolve or reduce cognitive dissonance, i.e. attitude change.

This simplified systems viewpoint to facilitate an understanding of a highly active and complex organization such as the Medical Battalion of the 82d provided the mental health professional with a framework in order to maintain (or attempt to) a sense of professional identity. Yet, in the developmental sequence, the utility of this perception, although necessary, is passive and limited. Activating the framework necessitates behavioral guidelines that I have labeled as prescriptions (for survival) that may expedite the resolution of the cognitive dissonance or attempt to hasten the end of the "nightmare".

PREScriptions:

- (1) Resolve issues of integrity based on labels or positions as soon as possible. Mental health professionals assigned to a new organization that drastically departs from more traditional settings might be inclined to prematurely delimit the range of professional activity that may be based more on past needs, experiences, etc, rather than newer demands of the situation.
- (2) Be visible but cautiously so. The caution specifically refers to one's efforts to define or redefine the professional role. Herein, lies an inherent danger of wanting to become like "them" based on at least a questionable premise of "if I am like them, the better I can render the services that I have to offer". Observe and be visible from a distance and appreciate the differences.
- (3) Be informed to inform. The resultant overlap of elements within the organization create a high probability that decisions made elsewhere within the Medical Battalion will have an impact on MHCS. A periodic phone call to the S-1, the Headquarters and Support Company Commander might be revealing; attendance at Commanders' meetings might be useful. Designating a representative from the enlisted ranks of MHCS to attend the First Sergeant's meeting is necessary to keep in touch with policies and missions that affect your Gs. Be aware of the doctrine that affects the functioning of those that work with you. Interact frequently in

person with the Division Surgeon, the S-1, the XO and the Company Commanders of the Medical Battalion.

- (4) Be prepared to set limits and to provide the rationale for such. Adopting a crisis intervention model creates a vulnerability to excessive and ineffective "extinguishing of fires", a percentage of which might not be in the best interests of the patients, a company commander, an organization or the mental health professional. The ability to diplomatically say "no" is crucial.
- (5) Differentiate between nice-to-have (or do) and need-to have. In a peacetime posture, there is an increased opportunity to expand services which may be of the nice-to-do or have variety but which may cloud the ultimate combat mission of MHCS.
- (6) Closely monitor your own physical, emotional, and educational health. Typically, the day is long and hectic. Over a long period of time, a decrease in functionality and effectiveness of the mental health professional may become apparent and may affect home life. Your professional colleagues are an invaluable source of data feedback along this principle.

Some other general guidelines might be:

- (1) Make input for change in the combat posture of MHCS and seek opportunities to test these as do other services (e.g. optometry, dentistry), especially as it may relate to readiness, organizational role and function of MHCS in such an environment.
- (2) Establish a relationship with those that logistically support you e.g. the S-4, DMSO.
- (3) Create a bond with the Headquarters and Support Company Commander as he is one of the "bosses" of a majority of the MHCS staff.
- (4) Be sensitive to and prepared to respond to the demands placed on the Gs from outside of MHCS but not to the detriment of patient care.

Probably, the merger of all these prescriptions and guidelines is based on higher order combinations reflected in the notions of tolerance for uncertainty parallel to the inevitable conclusion that what is certain in an organization such as this is change. If the mental health professional discovers in himself/herself less agitation, less upset and less intimidation by the potential "losses" of professional integrity, then these might be indicators that the resolution is moving at a steady pace. To say "It's only a dream" and "I'm not going to be hurt professionally in this organization" and to continue to experience the "nightmare" generates a sense of comfort because now one begins to detect a control of the situation. And ultimately, things are bound to get better. "...the morning cometh".

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DESERTION IN THE VOLUNTEER ARMY: A PROJECTION ON IN ABSENTIA POLICY

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This study addressed the problems raised by the GAO report concerning possible excessive costs in apprehending, controlling and re-integrating deserters. Results indicated that present Army policy offers a viable deterrent to desertion and thus should be retained. Additionally, results indicated that given an in absentia policy, an increase in deserters, desertions and their apprehension costs would occur. Alternative Army proposals for dealing with deserters are in part meritorious and can further improve the Army's ability to conserve manpower in an all-volunteer force. Finally, there were indications that an in absentia policy would adversely affect troop morale.

This study was prompted by a Government Accounting Office (GAO) Report, "Millions Being Spent to Apprehend Deserters Most of Whom are Discharged as Unqualified for Retention." In that report, the GAO recommended that the Army: (a) stop "apprehension of deserters except when the individual is wanted...for another crime or security matter and discharge them in absentia after they have been absent for a stipulated period"; or (2) not routinely undertake aggressive apprehension efforts until an individual has been gone long enough to indicate that a voluntary return is improbable." The intent of the study was to: (a) determine true desertion rates and true costs of desertion to the Army; (b) determine whether apprehension of deserters under current Army policy is a deterrent for an identifiable population of potential deserters; (c) determine the feasibility and applicability of differing methods of disposition of absentee cases based upon varying degrees of U.S. military involvement in international affairs and civil disturbances; (d) determine whether in absentia discharges are feasible; and (e) make recommendations on current Army policy on discharges in absentia and affect changes in policy on desertion as suggested by GAO. In conducting this study, the author reviewed detailed cost figures supplied by HQDA, U.S. Army Military Personnel Center, Enlisted Records Center, Personnel Control Facilities (PCF), and the U.S. Army Retraining Brigade. Desertion rates were based upon Enlisted Master File data. Further, a longitudinal survey of trainee (BCT) attitudes and perceptions of AWOL and desertion and changes to present policy was conducted to determine the potential magnitude of desertion under in absentia discharge situations. Various recommended alternatives, proposed by Army agencies, were examined as well as those suggested by the GAO. Finally, legal precedents and literature were reviewed and analyzed to assess the legal consequences of establishing in absentia discharges that could constitute adverse separations from service.

While all of the above mentioned goals were investigated and reported (Sublett and Greenfield, 1978), for the purposes of the present paper, only the data on deserters, desertions, and desertion policy will be reported here. The above overview has been presented so the reader will be aware of the entire breadth of the investigation.

Who is Most Likely to Desert? The Army Research Institute (Bell and Houston, 1976; Bell and Bell, 1977) found personnel most likely to desert were: high school drop-outs; whites; personnel with lower mental ability (below mean scores on AFQT); personnel who are 17 or 18; volunteers; men in their first tour of duty; men in transit from one assignment to another; men at the end of Basic Combat Training (BCT) or Advanced Individual Training (AIT); men from the South; men in confinement (or under criminal or disciplinary charges); men classified as duty soldiers; men in lower skilled MOS; and men with previous disciplinary or criminal offenses. There is little literature to suggest that women present a problem as deserters or potential deserters; however, this may change with increasing enlistments of women into the Army. Air Force studies on personnel most likely to encounter disciplinary problems (not limited to AWOL and desertions) state that personnel most likely to have problems are those in first or original tour of duty; less than four years of service; most heavily concentrated in grades E1 to E3; and age 19 or less (See Beusse, 1977). Navy research (Bradshaw, 1975) for deserters during the period 1963-73 found demographic characteristics similar to those in the Army and Air Force studies. A recent Washington Post article (27 Oct 77) stated that Navy desertions during peacetime have risen to 31.7 personnel per 1,000 and that most of these desertions occur during first-term enlistment and especially during or immediately after sea duty. The article quoted the Navy as saying that personnel most likely to desert were ages 17 or 18 who had scored lower than most naval enlisted personnel on AFQT tests.

When is Desertion Highest and Where do Desertions Most Frequently Occur? Desertions increase during war, decrease during peacetime, and in either case most desertions occur within the continental United States. This observation is fairly well supported in the literature from 1945 to the present (See Hartnagel, 1974; Shils, 1977; Bell and Houston, 1976; Bell and Bell, 1977).

Why Do Personnel Desert? The most frequent reasons given for desertion are personal, family, and financial (Bell and Houston, 1976; Hartnagel, 1974; Bradshaw, 1975). Failure to adjust to military life is also given as a reason for desertion. In studies of Viet Nam era deserters, researchers did not find that opposition to the war or to the military's ethics or morality were major reasons for desertion. In examining Bell's recent work, Shils (1977) stated that the primary reasons for desertion were consistent and comparable among deserters from the Second World War through Viet Nam. Other researchers suggest that organizational issues and the destruction of primary group bonds formed during initial training are perhaps more important reasons for desertion. Littlepage and Rappaport (1977) argue that organizational and troop environment factors combine to produce individual desertions. There is also a large body of research, dating from 1945, suggesting that the disintegration of primary groups

formed during BCT and AIT and which are later destroyed, by sending individual soldiers to a variety of assignments, are part of the reason for the high frequency of desertions during first term - first tour of duty (See George, 1971; Janowitz, 1964; Homans, 1946; Shils and Janowitz, 1948; Stouffer, 1965).

Desertions as Maladjustment or Social Deviance. Various studies have focused on deviance, delinquency and maladjustment of deserters. Hartnagel (1974) examined the phenomenon of desertion as deviant behavior, defined by Merton and others. Hartnagel found little evidence to suggest that deserters were rebelling--one of Merton's deviance categories. Instead, Hartnagel found evidence of innovative deviance: That is, individuals were using illegitimate means to either solve their problems (family or financial) or to get out of the Army. This finding is indirectly supported in Bell and Houston's research and in the Medical After Action Report from the Presidential Clemency Processing Program. (See Hillenbrand and Peacock, 1975.) Drucker and Schwartz (1973) found that AWOL soldiers differed from non-AWOL soldiers in personality, education, intelligence, aptitude and military component. Since the Second World War, researchers have also found evidence of maladjustment, variably defined in results of psychometric tests as neuroses, psychopathy, hysteria and hypochondriasis. (See Feldman and Maleski, 1948; Fodor, 1947; Montgomery and Stephens, 1972; Russell, et al., 1971.)

Deterrent Effects. The recent literature provides little evidence of deterrent effects of Army AWOL policy and apprehension procedures. Hartnagel's sample of AWOL soldiers, on the average, said that neither a dishonorable discharge nor criminal record would have much effect on their future civilian lives. Bell (1976) stated that most first time deserters do not feel compelled by either policy or criminal penalty consequences to remain in service and solve their problems. Bradshaw (1975) supports this argument in his study of Navy deserters. Recently, a short survey of first tour personnel at Ft Riley by US Army Retraining Brigade personnel indicated that about 10% of surveyed personnel said that less than honorable discharges would have little effect on their personal lives and that they would desert and accept an in absentia discharge that was less than honorable. (USARB, 1977) Except for the USARB study, none of the above studies deals with subjects who have not deserted. Specifically, no study has identified a population of soldiers with characteristics of deserters who are in fact deterred by present Army policies.

The literature also suggests that AWOL soldiers use Army policy and criminal penalties as a means, although illegitimate, to a desired end--to get out of the Army. Bell and Houston (1976) found that the myth of the "hunted federal fugitive" was not supported in their research. Many deserters being sought for criminal prosecution led "normal" lives, held good-salaried jobs and behaved, while in flight from prosecution, as good citizens.

Summary. The above review of literature tells the reader much about the typical deserter: Where he comes from; why he deserts; why he doesn't feel deterred by criminal charges. The literature does not tell the reader whether in absentia discharges would make desertion more attractive to a large number of soldiers.

METHOD

The population was defined as all troops in Basic Combat Training (On an average, there are approximately 32,000 trainees at a given point in time throughout the TRADOC system). Five BCT sites (Forts Dix, Jackson, Sill, McClellan and Leonard Wood) were chosen as data collection centers on the basis of geographical stratification and some variation in the kind of training and assignment the troops would eventually have (e.g., infantry, engineers, military police, etc.). While it is recognized that this was not entirely a randomized selection process, it was felt that it offered an adequate mix of the current BCT population.

The sample included approximately 1000 trainees (933 were actually obtained). At each site, one company of trainees in their first week at the BCT site was randomly selected for inclusion in the study. Additionally, control subjects were also selected at Forts Sill, McClellan and Leonard Wood.

A longitudinal study with post test-only control groups was utilized. This design incorporated a short longitudinal study to measure not only the perceptions and knowledge base concerning AWOL and desertion, but also possible changes in perceptions over time. Thus all subjects were measured at two points in time (at the beginning of BCT--T1--and at the end--T2). Additionally, to control for the possible effects of experimenter and test bias, three control groups (N=400) were administered the survey at T2 only. These data were then compared to those of the original sample (at T2 only) for any possible differences. Any significant differences might indicate biases which could limit the generalizability of the study.

Two parallel survey forms were developed using current acceptable techniques as described in the psychological and sociological literature (see Goode and Hatt, 1952; Oppenheim, 1966; Campbell and Stanley, 1963; Payne, 1951; Festinger and Katz, 1962; and Sellitz et al., 1962). Consideration was given to question sequencing, wording, length, threat potential, confidentiality, and validity (face, content, and construct). Survey questions were designed to tap the trainees' knowledge base (e.g., content of the policy, procedures and consequences of AWOL and desertion), and his beliefs and perceptions concerning deterrence and effects of current policy and in absentia changes to the policy.

In developing the surveys, pilot testing was conducted at Fort Knox, KY with approximately 400 trainees in BCT. This data analysis was used to reject non-workable questions, determine construct validity of the surveys, compare the parallel forms and to test strength of responses based on a survey written in the first person ("I would....") or third person impersonal ("A soldier would....").

RESULTS

Time One (T1). Before analyzing the data, two hypothetical groups were proposed and are shown in Table 1. The aim in establishing these two groups was to see whether they would make differing responses to key questions about reasons for deserting, about attempts to seek help through Army helping agencies and

about conditions which could cause them to return voluntarily. In analyzing the Ft. Knox pilot data, it was learned that two factors--age 17 or 18 versus 19 or older and Mental Category IIIB or below versus IIIA or higher accounted for over 70% of the variance in responses made by the two groups to key survey questions.

Having concluded the validation of the pilot tests, the Time One (T1) Survey was conducted at the five BCT sites previously mentioned. At each site, test conditions were approximately the same, and the surveyors assured that the test was given in the same manner at each site.

Table 2 lists those items which appeared to discriminate between the two hypothetical groups.

Questions concerning why a soldier would desert, his knowledge base on desertion and under what circumstances soldiers would return voluntarily following desertion provided significantly different responses between the two proposition (hypothetical) groups on several items and marginally differing responses on others. It appears that the individuals in Group I do in fact respond differently on the majority of questionnaire items. Eleven other items were also highly discriminatory ($p < .20$). Table 2 contains the report of initial data analyzed. These results are quite similar to those found during the pre-test phase at Fort Knox.

Concerning the factor--possession of high school diploma or GED--as a potential predictor of military success, some observations are appropriate. This factor accounted for little of the variance. It was noted in records reviews that many of the high school graduates and those with a GED had Mental Category scores of IIIB or lower. Further, it was noted in the pilot survey at Ft. Knox that reading the questions aloud to the group was better than having the group read silently and answer the questions. These observations may have a great deal to say about using high school diploma possession as a predictor of military success. Indeed, even as the surveyors read the questions, worded simply, they sometimes had to assist individuals in answering the questions. The inference here is that the Army may be experiencing what so many critics of education are talking about: that education in our schools is getting worse and that graduating students are not acquiring the basic communications skills of reading and writing. On the other hand, the darker interpretation could be that the Army is simply not attracting the higher-skilled high school graduate under the current all-volunteer Army. It would be advisable to examine the relationship, in future studies, between reading level and mental categories, AFQT scores.

Time Two (T2). Of the 933 sample subjects surveyed at Time One, 788 (84.4%) were successfully surveyed at Time Two (T2). Losses at T2 were due to several factors: sick and temporarily infirmed; attrition from units (There was one desertion from one unit surveyed, and, interestingly, this individual fit in the Group I category); or special duty. Most losses, however, were due to illness and special details which unfortunately kept these trainees from our T2 group. Even though 84% is generally considered to be a successful follow-up, the

authors asked the question: Did these losses represent a subgroup of our sample who would have answered the items differently and thus bias the findings? The only way to be completely certain of how these individuals would have responded would, of course, have been to search them out and administer the survey. This was not done due to time constraints; however, other checks on this possible source of bias were accomplished. The authors systematically compared the demographics of those who took the survey with those who did not and found no significant differences in demographics. Additionally, the "lost sheep" responses at T1 were compared to remainder of T1 sample for any response differences. No statistically significant differences were noted here either. It was concluded, therefore, that these losses were not interfering with or biasing the survey results in any meaningful way.

At Time Two (T2) the findings tend to be the same or similar to those of Time One. However, statistically ($p < .05$) significant response changes were generated at T2 and are discussed. While most respondents at T1 agree that people are likely to change jobs often today, the feeling is more strongly held at T2. Conversely, at T2 most of the sample held that quitting a job for personal reasons was all right, and at T2 this perception is less strongly held. The item, "A money problem could make a soldier desert," yielded no clear trend one way or the other, as the mean, median and mode all fell at the "I don't know" response. At T2, however, this perception changed to a "partial" agreement that this problem could make a soldier desert. At T1 the sample reported strong agreement with the contention that a family problem could make a soldier desert. While this perception was still true at T2, it was less strongly held. For the item, "If a soldier couldn't get used to the Army, the soldier would desert," agreement was stated at T1 which was lost at T2. The mean score here clearly shifted to an "I don't know" response. On the issue of utilizing the chain of command for help with family or financial problems, the sample at T1 clearly felt they would use it and continued this belief even more strongly at T2. Alternatively, at T1 most respondents reported that they would seek help from outside the chain of command, and this was also more strongly held at T2. Interestingly, this sample reported at T1 that deserters would stay away from the Army unless caught. At T2, however, they were decidedly less certain of this. Somewhat paradoxically, a soldier would still desert even though he understood that arrest and confinement were possible consequences of desertion. This finding was more strongly felt at the completion of BCT than at the beginning.

While the above reported differences in perceptions were found between T1 and T2, generally the survey findings indicate that the results reported from the first survey are, for the most part, reliable. Further, the BCT experience had not altered radically the soldiers' perceptions concerning AWOL, desertion and existing deterrent effects.

To allow comparisons with two other studies and summarize their findings across a larger E1 through E4 population, the following question was added to the T2 survey:

Assume a new Army Regulation says: "For all enlisted personnel listed as dropped from rolls for AWOL in excess of 90 days, an administrative discharge under other than honorable conditions will be mailed to the individual's home of record. In addition, the Army will not try to apprehend the AWOL soldier." If this statement had been official when you joined the Army, would you have gone AWOL by this time?

Table 3 compares respondents' answers. It's evident that findings in the Ft. Ord sample and the T2 sample are consistent but represent approximately half of the percentages from Ft. Riley (USARB). It should be noted that the USARB study method allowed for confidentiality and anonymous responding. This could account for the differences among the studies. Nevertheless, three different studies support the contention that under an in absentia discharge policy the frequencies of AWOLs will increase over the present rates. It is recognized, however, that intentions as reported do not necessarily equal actual behavior. Thus, instead of increasing the present desertion rates five times as the data dictate, a conservative approach is to accept about one quarter of the reported increase, moving desertion rates from 1% to 2%. This change in rates was used to determine true costs of desertion.

DISCUSSION

Deterrent Effect of Present Policy. Most respondents to the survey indicated that present policy on AWOL and desertions did provide a deterrent effect. Most said that they would not desert under any condition. There was, however, an identifiable subsample of the sample (about 200) who had demographic characteristics similar to actual deserters. These personnel, who were 17 or 18 years old, with mental categories at IIB, IVA, 8 responded that they would desert for a variety of reasons-and that they would not return to military control unless apprehended. That this group was different from other soldiers in the BCT sample in most of the survey responses was statistically significant. The second time these personnel were surveyed, they did not generally say they would desert under in absentia conditions, when asked the question directly; however, other responses to desertion questions remained the same from the first survey. This discrepancy led the authors to believe that the strength of group bonds at the end of Basic Training was contributing to this difference in responses. Nevertheless, there is still enough consistency on most desertion questions given at Time One and Time Two to maintain that some of these personnel, with characteristics like deserters, would desert if certain crises arose in their lives. While not all of these personnel could be realistically expected to desert, only an increase of the present rates from 14 per thousand enlisted force to 28 per thousand enlisted force (approximately 1% to 2.6%) would return desertion figures to those immediately after Viet Nam. It is possible, therefore, to conclude that an in absentia discharge would only aggravate present desertion rates. No basic alteration in present policy on AWOL and desertions should be made.

Other Survey Findings. While the survey findings do not indicate a basic shift in present policy, the survey data do show that the Army should attempt to conserve "high risk" manpower in several ways. Many survey respondents, those with characteristics like deserters, indicated an unwillingness to trust Army help. This may be due to pre-formed ideas about the assistance abilities of institutions in general, and not just about the Army. Also, most of these respondents said that they would leave any job for personal reasons, and, perhaps this also indicates that there are established patterns of work that are dysfunctional. These data indicate that the Army has a difficult job in convincing "high risk" soldiers that the Army can provide them legitimate help in solving their problems. Also evident from the survey findings is the fact that if these "high risk" soldiers did desert, the Army would have to actively seek their apprehension. In this respect, the GAO proposal to discharge them in absentia would only make it more difficult for the Army to control them. What needs to be examined are methods of operation concerning the maintenance of recruits and not the alteration of present policy on AWOL and desertion. It was recommended that USAADMINCEN pursue the survey group out through first tour of duty in order to refine the recommendations of this study in general. This recommendation was accepted and is now a current tasking at USAADMINCEN, Ft. Harrison, IN.

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Table 1

HYPOTHETICAL RESEARCH GROUPS

<u>Group One (I)</u>	<u>Group Two (II)</u>
Soldiers who are: Ages 17 or 18 No high school diploma or GED Mental category III or lower Family income \$6,000	Soldiers who are: All other possible combinations than those in Group I

Table 2

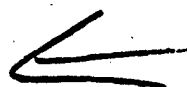
PROBABLE DISCRIMINATORS BETWEEN GROUP I AND GROUP II RESPONSES

<u>Questionnaire Item</u>	<u>p<.05</u>	<u>p<.20</u>
Today a person is likely to change jobs often instead of working at one job.	*	
Quitting a job for personal reasons is all right.	*	
Leaving the Army for personal reasons before end of enlistment is all right.		*
Desertion is all right during peacetime.	*	
Desertion is a Federal crime.		*
Punishment for deserting the Army can be a jail sentence.	*	
If a soldier has a good reason, desertion is all right.		*
A money problem could make a soldier desert.		*
A family problem could make a soldier desert.	*	
If a soldier couldn't get used to the Army, the soldier would desert.	*	
If a soldier had a money or family problem, the soldier would ask chain of command for help.		*
If a soldier knew he could be discharged for desertion, while AWOL, he would desert.		*
To solve a family or money problem, a soldier would ask someone other than in the chain of command for help.		*
If a soldier deserted, the soldier would return voluntarily if the Army wrote and asked.		*
If a soldier deserted, the soldier would stay away from the Army unless caught.		*
If a soldier deserted, he would return voluntarily if the police told the soldier's family.		*
If a soldier understood he could be arrested and sent to jail for deserting, he would still desert.		*
It would be all right for a soldier to desert, not return, and get a discharge that was less than honorable.	*	

TABLE 3

PER CENT SAYING DESERT UNDER AN IN ABSENTIA POLICY

	Ft. Riley	Ft. Ord	ADMINCEN Study
Per Cent	10	5.8	4.6
Sample Size	562	262	1104



THE PREDICTION OF PERFORMANCE AND ATTRIBUTION OF
RECRUITS DURING BASIC TRAINING

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The Armed Forces are considering supplementing the present entry medical evaluation with an evaluation of physical fitness (stamina and muscular strength) and an assessment of the ability of recruits to perform under stressful conditions. The evaluation was designed for two purposes: (1) to predict performances on militarily relevant tasks (common soldiering tasks, Army physical fitness tests), and (2) to attempt to identify recruits who may lack the physical aptitude or ability to cope with the rigors of military training.

In the years since the advent of the Volunteer Army, the growing attrition during basic training has been a major concern of the military. The cost of this nearly 20% loss of personnel has been estimated to be upwards of 190 million dollars a year. The intangible costs in terms of administrative, legal and consultation time cannot be estimated.

Our laboratory was tasked by DCSPER to develop an evaluation battery using a sample of male and female recruits entering the Army, and to determine its effectiveness in predicting both performance during, and subsequent success or failure in basic training. The results thus far have demonstrated that components of the evaluation are accurate predictors of the performance of military tasks, with correlations in the range of $r = .52$ to $.88$. The single most powerful predictor of specific task performance being the isometric leg strength of the individual. The overall discharge rate from basic training is typically around 20%; this in itself limits the predictive power of any normally distributed measure of performance. In addition, many of these discharges take place during the first week of training and the basis for separation is difficult to judge, i.e., training injury, EPTS injury or defect, attitude or aptitude for service, etc. A discriminant analysis was used to develop an equation based on the variables measured and the classification of trainees into two mutually exclusive categories: a) successful completion or b) discharge from the service for medical or administrative reasons. The use of this analysis allowed us to correctly classify 86% of those successfully completing basic training (good specificity) but only 26% of those who were discharged (poor sensitivity). The low sensitivity suggests that not much confidence could be placed in our ability to identify individual trainees on the basis of their response profiles. However, the importance of the psychological or motivational factors for the completion of basic training was demonstrated by the significant contribution to

the equation of the Health Opinions Survey (HOS) and the Response to Life Problems (RTLTP). In fact, when seven items from the HOS were used for classification, a significant difference was found ($F = 15.87$ $df = 1/100$ $p < .01$). The seven item HOS has a specificity of 71.7% and a sensitivity of 62.7%, which is a substantial improvement over the previous discriminant model. In this case the discriminant analysis reduced the uncertainty involved in the selection of personnel and provided information that may be useful in terms of pre-enlistment counseling or remedial action.

Within the limited framework of this study the importance of replication cannot be overemphasized. As the accession policy or population entering the Army changes, the predictive validity of this model will also change. Likewise, the application of this type of evaluation to the prediction of job related performance remains to be accomplished and evaluated.

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**SLIM EAGLE WEIGHT CONTROL PROGRAM:
THE INTER-DISCIPLINARY APPROACH OF THE
101st AIRBORNE DIVISION (AIR ASSAULT)**

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Weight Control is a major nutritional concern for 20 to 40 million Americans (Hafen, 1975). Obesity is considered a serious health problem for the U.S. population and has been shown to be the commonest of nutritional disorders. In addition to the health hazards, obesity is also considered to be a threat to social and domestic happiness and to economic security. Mayer (1968) dramatized this problem by stating that "Obesity has become in our time a national problem, if not, indeed, a national obsession" (p 1). Obesity has been identified by the Army Chief of Staff, General Bernard W. Rogers, as a major problem facing the U.S. Army. In addition to jeopardizing the health of the U.S. Soldier, obesity and the accompanying lack of physical fitness is considered "a detriment to the readiness and combat effectiveness of the United States Army" (AR 600-9, pp 1-2). Although Army physical fitness and weight standards have been in effect for many years, that the Army Chief of Staff recognized emphasis on the enforcement of these standards was lacking. General Rogers, therefore, initiated action to combat obesity in the Army with the introduction in November 1976 of The Army Physical Fitness and Weight Control Program, AR 600-9. This new regulation was intended as a major revision of AR 600-9. The stated objectives of the weight control program are to:

- a. Maintain the weight of all personnel at a level which is best suited to permit them to perform their duties in a peacetime and combat environment.
- b. Present a smart soldierly appearance expected of a combat ready army (AR 600-9 Chapter 3, p 3-1).

In introducing this new regulation, which became effective 3 January 1977, General Rogers made a firm commitment to eliminate "(Army Times, August 28, 1978 p 1). Emphasis on weight control has not faded since its introduction, in fact, the Army Weight Control Program continues to be well publicized and emphasized in both official and unofficial Army documents and by policy directly from the Chief of Staff (as recently as 17 May 1978). Front page news articles concerning the problems of the obese soldier and the management and implementation of the weight control program are common and frequent in the Army Times. The seriousness of the Army commitment to weight control was documented in a recent Army Times article (5 June 1978) which stated, "Army leaders will open a new campaign in their war on fat this summer as strict physical fitness and weight control standards assume a larger role in many officer personnel management decisions" (p 8). A follow-up to this story made front page news in the

August 28, 1978 edition of Army Times which warned "Fat Officers" of the personnel changes which "appear to be the ultimate threat to career-minded chubby officers." (p.1).

General Rogers made it clear that the problem of obesity in the Army would be solved. Commanders at all levels were given the responsibility for enacting the weight control program at their levels and insuring effective participation of all personnel. While the weight control regulation provided a basic framework, it did not provide definitive actions essential for prevention or treatment. Local command initiative and positive, innovative approaches to weight control were encouraged.

SLIM EAGLE WEIGHT CONTROL PROGRAM

MG John A. Wickham, Jr., Commander of the 101st Airborne Division (Air Assault), made a strong commitment to insure the effectiveness of the weight control program at Fort Campbell, Kentucky. In a policy letter dated 28 January 1977, MG Wickham not only announced the implementation of AR 600-9, but added Campbell Regulation 40-13 Eagle Weight Control Program, dated 28 January 1977, which established the local procedures and policies governing weight control. The program was later renamed the "Slim Eagle Program." In his policy letter, MG Wickham emphatically stated "fat soldiers have no place at Fort Campbell" (p 1).

THE INTER-DISCIPLINARY TEAM APPROACH

Under the provisions of CAM Reg 40-13, the major unit commanders were tasked with the responsibility for supervising the weight programs in their commands, while the AC of S, GL was given the overall staff supervision responsibility and the Division Surgeon was tasked to provide technical and medical supervision/assistance to the Commander. The role of the physician in the Troop Medical Clinics was also clearly identified and outlined in the regulations. The physicians has been-given the primary responsibility for evaluating obesity and designing an individual treatment program.

The Division Surgeon recognized that obesity can be much more than just a medical problem. The need for consultation and involvement with other health care professionals was indicated, especially in planning for treatment and prevention programs. He, therefore, turned to the Division Psychologist and the Hospital Dietary Service for consultation and professional support in planning for an inter-disciplinary approach to the problem of obesity.

Drawing upon the resources of the inter-disciplinary team, the Division Surgeon published a fact sheet which outlined supporting and complementary actions available to assist commanders in implementing an effective weight control program. The actions developed covered two general areas: a weight awareness program and a dietary program.

A. The Weight Awareness Program was designed to consist of lectures, posters, and pamphlets to provide an educational base for the program. The specific components included:

1. Instructional classes presented by the Division Psychologist and Hospital Dietician to both the overweight soldier and his wife.
2. Dependent wife program sponsored by Army Community Service to provide cooking and nutritional instruction.
3. Information pamphlets, posters, and news articles explaining the weight control.
4. Group and individual psychotherapy by the Division Psychologist to provide insight into the problems of obesity and to plan individual treatment programs.

B. The Dietary Program was designed to provide:

1. Weight watcher's menus and diet plans.
2. Instructions for mess hall personnel in preparing/serving food to reduce caloric intake.
3. Nutritional/caloric charts and weight scales in eating facilities.
4. Weekly articles in the post newspaper entitled "Weight Watcher's Corner" providing dietary hints, recipes, etc.

These two programs along with the medical care outlined in the Army and Campbell regulations provided the foundation for the inter-disciplinary health care team approach which resulted in the Slim Eagle Weight Control Program.

Over the following six months, the Slim Eagle Program was monitored, improved and streamlined. Continued interaction, feedback and consultation between the General Staff, Commanders, and the health care team, composed of physicians, physician's assistants, medical specialists, dieticians, and the psychologists, led to the decision to rewrite CAM 40-13. The decision was reached to include in the regulation the inter-disciplinary health care team approach outlined in the Division Surgeon's fact sheet (January 21, 1977). Other additions and changes in the regulation were designed to improve the administrative procedures, the accountability, the control, and the evaluation factors. A new regulation was, therefore, written and approved. The new CAM Reg 600-10 superseded CAM Reg 40-13 and became effective 14 October 1977. The complete regulation is provided in the appendix.

The major health care change which became effective with CAM Reg 600-10 was to include under the Responsibilities paragraph, the actions of Division Mental Health and Clinical Dietary Service Personnel. The regulation provided that

Dietary Service would coordinate a presentation to provide diet instruction and education while Division Mental Health Service would present behavior modification techniques for weight control. Although not identified in the regulation, but presented in the lecture, Dietary Service also offers follow-up diet counseling for those individuals who continue to have difficulty with weight control. Division Mental Health Service also offers further assistance through group therapy, both relaxation and hypnosis, for individuals who tried the behavioral program, consulted with the Dietary Service and still had difficulty losing weight.

RESULTS

Medical Facility

A record of each overweight individual's progress is obtained every two weeks by a weigh-in at the Unit Aid Station or the Troop Medical Clinic. The medical NCO or Physician's Assistant is responsible for obtaining a weight on each individual and recording that weight on FC Form 2144, "Weight Control Card" which is retained by the medical facility and on FC C-29 which is a wallet size card carried by the individual. Each month the medical facility prepares a record, FC Form 1415, on all the individuals who were weighed that month. The form contains columns for: name, rank, SSN, unit, date entered program, initial weight, goal weight, previous months weight, present weight, and date to achieve desired goal.

Division Surgeon

The weight record forms are then forwarded to the Division Surgeon's Office by the end of each month. No further action is taken. The results are not tabulated nor are the reports forwarded to higher headquarters. Although a tabulation of the data is planned at the end of the fiscal year, there are no figures available. The individual record sheets for each month from each medical facility, however, are retained on file. Plans for tabulation of data have been made and forms have been prepared to provide by major unit, total Division, and by total Installation the following: number of new personnel identified and placed on the Slim Eagle Program, number of personnel currently on the program, and percentage of personnel losing the required weight.

Hospital Dietary Service

The Hospital Dietician recorded the number of individuals who attended the Weight Control Lecture given jointly by the Dietician and the Division Psychologist. In fiscal year 1977, 851 active-duty soldiers attended the lecture. Of that number, 52 returned for follow-up diet counseling. The Dietician then referred 19 to the Division Psychologist for further assistance.

Division Mental Health Service

The Division Psychologist managed the weight control program for mental health. In fiscal year 1977, 19 Slim Eagle participants were referred for group

psychotherapy, which was designed to be opened-ended with replacement. Of that number, only twelve enrolled and attended group sessions. Two dropped out of the group before completing three sessions. The results from the remaining ten were as follows:

- A. One met weight goal of 32 pounds.
- B. One ETS after weight loss of 17 pounds.
- C. Two PCS after weight losses of 12 and 17 pounds.
- D. Three dropped out after completing less than 8 sessions with weight losses, of 1, 3 and 6 pounds.
- E. Three continued until the group terminated with weight losses of 11, 19 and 37 pounds.

The group members did not all enter at the same time. The life of the group was thirty-three sessions at which time only three members remained.

The Unit Commander

Each Unit Commander was responsible for obtaining weight reports from the medical facility. The commander monitored the progress of each individual and took appropriate administrative action as outlined in the regulation in response to each individual's success or failure. Commanders were not responsible for reporting weight data to higher headquarters. The only information obtained from the unit commanders was verbal data suggesting that from at least an administrative standpoint the program is working well.

DISCUSSION

→ The Slim Eagle Program, according to all reports from command, is basically working well. The Army Regulation and the Campbell Regulation are workable and acceptable to most unit commanders, as reported in discussions between the health care team and the unit representatives. AC of S, G-1, reports no major difficulties or problems with the regulations. The weight control program has, therefore, been termed successful. ↘

Despite the publicity and the command emphasis on the Slim Eagle Program, there has been no evacuation or follow-up to determine the effectiveness of the programs in producing weight loss. The individual unit commanders know how effective each of their participants have been, but there has been little or no feedback to the health care team. From the Mental Health standpoint, there has not been a single instance of a unit or higher headquarters request for information on an overweight soldier, nor has there been feedback on the effectiveness or lack of effectiveness of either the lecture or the group treatment program. There have been no reports sent to or requested by the General Staff to investigate either the number of over-weight soldiers or the percentage of

soldiers losing weight at Fort Campbell, Ky. This is the minimum information essential to determine the true effectiveness of a weight control program. Instead, the emphasis thus far has centered on creating a program which functions administratively.

The Slim Eagle Program at Fort Campbell, Ky. appears to focus more of its attention on the identification of overweight soldiers, the development of negative reinforcement procedures and punishment and procedures for eliminating the obese individual from continuation of a military career. Prevention and treatment programs seem to play a secondary role as suggested by the lack of follow-up or involvement. The Slim Eagle Program appears to have potential, but more on-going communication and consultation between the health care team and command is essential. Continual follow-up and program evaluation is mandatory if this program is to provide effective procedures for both the prevention and treatment of obesity in the Fort Campbell community.

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MILITARY MOBILITY AND SETTING ROOTS IN THE 30 YEAR OLD

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Developmental theorists have recently attempted to articulate the normal developmental stages through which adults are expected to progress. While most research has been directed at validating these formative stages, little work has been reported on how adults in different life situations progress through the same developmental stages. The present study is an initial investigation into whether or not situationally different military and civilian lifestyles have a differential impact upon adult development.

The stage selected for investigation was the early 30's, since the developmental issues of this stage were assumed to be of such a nature as to maximize the situational differences between military and civilian lifestyles. The time around age 30 has been identified as a period of turmoil followed by a stage of settling down and setting roots in the early 30's. This study was specifically aimed at determining if forced mobility in the military has a negative impact on couples in their early 30's who are assumed to be facing a strong need to set roots.

Subjects for this study consisted of two groups of 20 mobile military and 20 non-mobile civilian couples. The mobile population consisted of 20 couples in which the male was a military officer experiencing frequent forced occupational moves. The non-mobile population consisted of 20 civilian families in which the male worked for himself or in a small business. Non-mobility was defined as the family having lived in one location for five years and having the option to remain in that location an additional five years. Couples were matched on age and years of education of male member, number of children, and total family compensation. Subjects were voluntary participants contacted through friendships or organizational affiliations.

A two by two design was used comparing mobile and non-mobile males and females on life satisfaction. Couples were compared on satisfaction with those aspects of their lives that could be taken with the family in moves, such as spouse, children, and career, and those aspects that had to be left behind, such as house, friends and community. They were also compared on a measure of self-actualization. Instruments used were the Personal Orientation Inventory, a Life Evaluation Chart, the Marriage Problem Checklist, and a Life Satisfaction Scale. These measures were supplemented by interviews of ten couples in each group who were willing to make the time available for an intensive interview. At the

request of the couples, the spouses were interviewed separately rather than together as originally planned. The husbands were interviewed by a male and the wives by a female interviewer.

All four groups reported satisfaction in each of the thirteen aspects of their lives under study. All four groups also scored at a normal range of self-actualization. On the semantic differential the non-mobile, civilian couples were significantly more satisfied than the mobile, military couples with own friends, child's friends, and owning a house. The civilian couples scored significantly higher than the military couples on Capacity for Intimate Contact and Feeling Reactivity on the Personal Orientation Inventory.

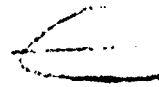
On the Marriage Problem Checklist there were few major problem areas indicated. All four groups reported the most concern with issues related to children and communication. The couples were especially concerned with the time they had available to spend with the children and to spend communicating with each other. These couples seemed to be in the midst of what has been called the family crunch time in which there is a maximum of time, energy and money having to be spent on the family. One of the problems of the family crunch time that was reported was inadequate time available to develop additional friendships. Each of the four groups reported satisfaction with the friends they did have but were bothered by not having more friends.

Within the military couples there were considerably more problems with temporary separations than with permanent relocations. The couple being separated when the husband was on deployment was reported as much more stressful than the moves the couples had to make together to a new location. The separations had a differential impact on husbands and wives. The husbands reported that the most stressful time of the separation was leaving the family, while the wives reported most stress at the time of the husbands' re-entry into the home. Furthermore, the spouses were generally unaware of the differential impact that leaving and returning had on their partners.

Consistent with developmental theories, the couples in the study were found to experience general satisfaction with their lives in the early 30's stage. The non-mobile civilian couples were busy establishing commitments to their occupations and families and setting roots in their communities. The mobile military couples were found to be establishing family commitments and commitments to their careers and were able to maintain a level of life satisfaction remarkably similar to the non-mobile couples.

The situational variables involved in a mobile military lifestyle did exert some influence on the level of satisfaction and self-actualization experienced by the military group. These situational variables, however, did not prove to be as strong an influence as originally anticipated. The results suggest that the major developmental issue of the early 30's might more accurately be conceptualized as the need to set roots through renewed commitments to relationships and careers rather than a need to set roots in a particular geographical location.

Recommendations are made regarding how separations and relocations can be made less stressful for military couples. Recommended are family life education programs and policy changes that are based on the adult developmental stages and issues that military couples can normally be expected to encounter at particular times in their lives. It is recommended that when possible, separations and relocations be made when couples are in the more stable and satisfying stages of adulthood, such as the early 30's, rather than in the midst of the tumultuous stages, such as the transition into the 30's time.



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A HOLISTIC APPROACH TO ASSESSING THE PSYCHOLOGICAL COMPONENT IN LOW BACK PAIN WITH THE MMPI

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There is a growing practice of medical psychology in military medical care facilities, as there is in civilian health care. We would like to focus today on a particular aspect of that practice of medical psychology, the psychological assessment of patients with low back pain, as a fairly representative area with implications for all areas of medical psychology.

Three areas will be discussed. First, the history of research in the use of the MMPI in the assessment of low back pain patients and the limitations of the trends in the literature to date. Second, the results of an unpublished quasi-prospective study of MMPI indices for treatment outcome in low back pain patients and discussion of interpretation of MMPI elevations and configurations for these patients. And third, discussion of a holistic model of health and illness, the biopsychosocial model, and some thoughts on why health care professionals have difficulty in adhering to this interactive model even when we might espouse it.

The literature on the relationship of the MMPI and low back pain patients dates to Hanvik's (1951) dissertation research in which he reported finding significant differences between MMPI's of patients diagnosed with "definite organic etiology" and those with "presumed psychogenic etiology." Subsequent research has taken the same focus on diagnostic differentiation, with some reports of no differences (Schwartz and Krupp, 1971; and Sternbach et al, 1973) and still more reports of significant differences (Calsyn et al, 1976; Freeman et al, 1976; Schwartz et al, 1972; Turner and McCreary, 1978).

In general this literature reports all low back pain patient groups have increased elevation on those MMPI scales, Hypochondriasis and Hysteria, felt to reflect tendencies toward preoccupation with one's body and toward expression of psychological conflict somatically. Patients without clear, consistent organic findings have been fairly consistently reported as having the highest scores on these scales. These cumulative findings have been generally interpreted as reflecting significant psychological involvement in the etiology and/or maintenance of a significant, even major, proportion of low back problems, to the point where non-self-limiting low back pain is often suspected of being psychogenic until proven otherwise.

The first unfortunate trend set by Hanvik was for the use of concurrently obtained MMPI and outcome data, rather than prospectively obtained MMPI data and follow-up outcome data. The second unfortunate trend was to use diagnostic impressions regarding etiology as the criterion, rather than some measure of functional outcome from the low back pain and course of treatment. In this latter trend, Hanvik and others have been implicitly adhering to a dichotomous, reductionist model, the organic-functional model, which assumes that etiology is either organic or functional, treatment is either medical/surgical or psychiatric/psychological respectively, and a "complete" diagnostic work up will allow for a definitive, precise diagnosis.

The dichotomous model's major misassumption is that the preponderance of illness syndromes are single etiology; its major danger and actual negative effect is that it blinds health care providers to the importance of the range of etiological factors in any given case and to the frequent reality that whatever the etiological bases of an illness, other factors might be as, or more, important in its exacerbation, prolongation, remission and/or alleviation.

The alternative to the dichotomous model is the dynamic, interactive biopsychosocial model, best described and discussed by Engel (1977) and Lipowski (1977). This model takes the biological, psychological and social factors into account for all patients and argues that findings are not present or absent but that in all cases of health and illness there are findings in all three dimensions and that the findings should reflect relative degrees to which each factor is inhibiting and facilitating the maintenance or recovery of health.

Thus the interactive model says that asking the MMPI to discriminate between low back pain patients with organic etiology and those with functional etiology is asking a wrong and misleading question and one which probably is unanswerable in any event. Rather, the appropriate question would be to ask the MMPI to indicate which patients have a psychological make up which will facilitate, or at least not inhibit, their obtaining a good outcome for their low back pain, and which patients are likely to have a poor outcome unless the inhibiting psychological factors are managed and/or treated appropriately.

A QUASI PROSPECTIVE OUTCOME STUDY

Method Psychological and physical evaluation was obtained at the time of presenting complaint for 140 patients with low back pain as the main presenting problem.

Patients were evaluated by the attending orthopedic surgeons at initial evaluation for functional limitation (5 point scale from normal to severe), physical findings (clear, inconclusive, none), and expectation (optimistic, indifferent, pessimistic). Patients completed a demographic information sheet and the MMPI at the initial evaluation.

Of the 140 patients seen for initial evaluation, 33 were located who completed a follow-up physical and psychological evaluation (13.6 months mean

time after initial evaluation). Twenty-seven of these patients had no prior surgical procedures for back problems, while 5 had one prior such surgery and 1 patient two prior surgeries. Diagnostically, 14 patients had herniated discs, 11 low back strain, 3 sequelae of old fractures, 2 degenerative arthritis, and 3 miscellaneous. Twenty-six patients were treated conservatively (bed rest, physical therapy, chemotherapy, and others in various combinations) and 7 patients were treated surgically. The sample is dominantly male (70%), with average age of 40 and evaluated initially as inpatients.

Follow-up was on an outpatient basis with one orthopedic surgeon rating all patients for functional limitation, physical findings, patient expectation and rate of progress (better than expected, as expected, less than expected), reviewing the intervening medical history, and confirming the initial diagnosis. Patients completed another MMPI, the Life Change Scale (an environmental stress index) and Topographical Pain Representation, and were seen by one psychologist for a structured interview.

The outcome measure involved a combination of the ratings, at follow-up, of functional limitation and rate of progress:

(A) Good outcome: Normal Functional Limitation, any rate of progress, or Minimal or Minor Functional Limitation, better than or as expected rate of progress.

(B) Poor outcome: Minor Functional Limitation, less than expected rate of progress, or Moderate, Severe, or Extreme Functional Limitation with as expected rate of progress.

(C) Very poor outcome: Moderate, Severe or Extreme Functional Limitation and rate of progress less than expected.

Data analysis was then conducted in 3 ways. (1) Multiple regression using outcome as the criterion and, in varying combinations, 3 physician ratings, 4 demographic and 14 MMPI variables as predictors in a total of 9 multiple regression analyses. No more than 7 variables were used as predictors at one time, each variable was used at least once and 5 of the predictor combinations were made on the basis of clinical experience. For significant regression analyses, no more than 3 of the predictors from each were selected by inspection, the raw coefficients rounded and the resulting equations applied to individual MMPI scale scores and physician ratings to obtain the percentage of accurate predictions, using optimum cut-off scores. (2) Multivariate analysis of variance with outcome and initial functional limitation as single factors and the primary 13 MMPI scales as dependent variables. (3) Nonparametric analysis of single MMPI indicators and physician ratings in relation to outcome.

Non-parametric tests of Sex X Outcome (Chi square) and Treatment X Outcome (Fisher Exact Probability Test) were insignificant, thus allowing Ss to be combined on these factors.

Results There are several significant and insignificant results of special interest to the foci of this paper.

On multivariate analysis, there was no significant relationship for the MMPI and the initial rating of functional limitation, neither multivariate nor univariate, indicating that the degree of functional limitation and psychological status were not related initially. There was, however, a significant relationship for the MMPI and the outcome rating obtained an average of 13 months later, specifically for the Depression ($p < .001$) and Schizophrenia ($p < .002$) scales. Inspection of the mean MMPI profiles (Figure 1) indicated that the predicted outcome was less favorable as the Depression score increased, while for the Schizophrenia score, which is best interpreted here as a measure of self and other alienation, as well as tendencies for cognitive and perceptual difficulty, a significant increase occurred only for the Very Poor outcome group. It is important to note that there are no significant differences obtained here for the Hypochondriasis ($p = .056$) and Hysteria ($p = .106$) scales; thus, with the current prospective study, no group mean differences were obtained for the two most commonly used predictors.

The second interesting significant result involved the multiple regression analyses, of which four obtained significance. When selecting the most promising predictors from each of these significant regression equations, applying the equations to the individual MMPI scale scores and physician ratings, and setting optimum cut-off scores for the prediction of good versus poor outcome, high accuracy rates were obtained (Table 1). While the rates of predictive accuracy are undoubtedly inflated by the fact that the same subjects used to develop the equations are also used to test the accuracy of the individual predictions, and the cut-off scores were selected a posteriori, the findings remain indicative of useful diagnostic data. Using the first and third equations with an expected good outcome base rate of 67%, overall prediction accuracy rates of 93% and 90% were obtained.

There are three aspects of these regression findings which are particularly interesting; the first is that the Hypochondriasis and Hysteria scales don't emerge as useful, conjointly, with the full range of the low back pain population; second, that the physician ratings, particularly initial ratings of patient expectation, have predictive value, and third, Hysteria scale elevation need not be indicative of a health inhibiting tendency but rather can reflect a health facilitating process.

The third and fourth significant findings of interest involve single indicators of outcome. Using signs based on Hypochondriasis and Hysteria scale relative (high point or not) and absolute ($> T70$ or not) elevation, four comparisons were non-significant. However, using the guidelines presented by Wiltse and Rocchio (1975), patients with extremely elevated Hypochondriasis and Hysteria scales (both $> T75$) were significantly more likely to have a poor outcome than patients with moderate elevations on these scales (both $> T65$) and patients without simultaneous elevation on these scales (Table 2); no significant differences were found between the latter two groups.

These findings indicate that extreme, simultaneous elevations on the Hypochondriasis and Hysteria scales are strongly suggestive of psychological

and/or social factors inhibiting health and are predictive of poor outcome. The findings also indicate, however, that when evaluating that 80% to 85% of the low back pain population without such simultaneous extreme elevation, the use of the so-called psychosomatic "V" (Hypochondriasis and Hysteria elevated above Depression) is unwarranted.

Similarly, absolute profile elevation must also be used cautiously; while 93% of patients whose MMPI is below T70 (n=13) have a good outcome, 55% of patients whose MMPI is at or above T70 (n=20) have a good outcome and the apparent difference is not statistically significant.

The fourth finding involves the aposteriori comparison of the initial physician ratings with outcome. Physician ratings of functional limitation and physical findings are not related to outcome, while the initial physician rating of patient expectation is strongly related to outcome (Table 3), such that a patient who is rated by the physician as optimistic is highly likely to have a good outcome (93%), while a patient rated as indifferent or pessimistic is liable to have a poor or very poor outcome (70%).

Post hoc screening of the data suggests other potential indicators of health inhibiting and facilitating psychological factors: (1) in nine patients with F as the high validity scale, 67% had poor or very poor outcomes; (2) ignoring overall profile elevation and high points. When Hysteria was elevated over Hypochondriasis, 81% had a good outcome (n=16), while when Hypochondriasis was elevated over Hysteria, only 53% had a good outcome (n=17). (3) when the dissimulation index (F-K, raw scores) was equal to or less than minus ten, 81% had good results (n=21), while then the index equaled minus nine or more, only 42% had good results (n=12). Taken together, these trends suggest that an individual with capability of psychological denial and minimization is more likely to return to an optimal level of functioning.

Discussion Interpreting the MMPI within the constraint that the MMPI should be only one of several procedures used in assessing any low back pain patient (Rath and Whitworth, 1977), the results presented here and clinical experience suggest the following are indicative of health-facilitating psychological states:

1. all MMPI scales less than T70
2. L or K as peak validity scale
3. Hs and/or Hy less than T75
4. Hy greater than Hs
5. D and Sc less than T70
6. $(3Hyt - 4Kt)/100 = 0$ or less
7. Physician sees patient as optimistic

The greater the number of indices which do not hold in any individual case, the more likely that there are health inhibiting psychological factors and these must be specifically discussed with suggestions for management or treatment as appropriate. The only rule that appears to approach pathognomonic sign status is a conjoint Hypochondriasis and Hysteria scale elevation of T75 or greater and

even here there are exceptions. The psychologist should expect to find evidence of psychologic distress in a majority of low back pain patients and realize that it is not part of the etiology of the current complaint in at least half of these cases. He should also keep in mind that depression will be an important factor more frequently than somatization or hypochondriacal tendencies. In light of the tradition that Hysteria scale elevation is indicative of a health inhibiting psychological process, how reliable is the suggestion from the current data that moderate hysteria scale elevation is indicative of an underlying health facilitating process, when the K scale (psychologic defensiveness and/or self esteem) is concurrently elevated? We believe it will prove reliable and helpful. It makes good sense psychologically if one acknowledges that: (1) the low back pain patient will inevitably have some sequelae to, or residual problems from, the current presenting problem; (2) good outcome is not a matter of complete restoration to premorbid functioning nor to low back functioning equivalent to that of a person who has never suffered any low back problem; and (3) the low back pain patient's outcome is at least partially reflective of how much or how little he allows the inevitable recurrent flareups or continuing physical limitations to interfere with his sense of well being and his functioning both in terms of productivity and life enjoyment.

Psychologically, Hysteria scale elevation can reflect a tendency to express psychological conflict somatically and to focus on somatic states in one's interpersonal interaction; but it can also reflect the positive effects of moderate hysterical defensiveness. In the latter case, one has the active pre-conscious ability to limit the awareness of discomfort and to minimize the importance of limitations and life problems; e.g. the avid golfer who learns to adjust his swing and his frequency of play to the changing status of his back and who doesn't allow this to change his outlook on life, on himself, or his relationship with significant others. When Hysteria is elevated concurrently with K, the health facilitating defensiveness is most likely to prevail (as in other life problems there is probably an upper limit beyond which the K elevation is reflective of dysfunctional defensiveness).

In an excellent paper, Caldwell and Chase (1977) propose the importance of "pain fear" and its management for outcome in the low back pain patient. They then suggest, without supporting data, that elevation on the Hypochondriasis and Hysteria scales, concurrent with a K scale elevation, would be particularly predictive of intractable postoperative pain; the data reported here indicate this would be true only of extremely high scale elevation. Caldwell and Chase would seem to err in overlooking the health facilitating effects of moderate to high Hysteria and K scale elevations; this should not detract from what otherwise is an excellent phenomenological description of the low back pain process.

HOLISTIC APPROACH

Discussion The ability to interpret the MMPI and other data sources in a meaningful way is dependent not only on empirically demonstrated relationships and clinical acumen, but also on one's basic philosophy and conceptual models. We have suggested that the interactive, dynamic biosychosocial model is the most

useful model, but we must also caution that psychologist and orthopedic surgeons alike tend to readily to revert to the dichotomous organic-functional model and to see the psychologically inept or troubled or discouraged low back pain patient as a "loser". Almost without exception health care providers tend to believe that they take into account the multitude of factors which determine an individual's health status and remain flexible in treatment planning as the patient progresses or fails to progress. However, this flexibility is very difficult to maintain in actual practice. It is difficult to maintain an openness to new data and to be open to changing one's views on recurrently presented data given the real need to make definitive decisions regarding patients and given the psychological need of the health care provider for some sense of closure. Argyris (1976) presents an excellent discussion of the ways in which the articulated theory for one's actions can systematically and persistently differ from an underlying theory which actually determines one's actions and prevents one from learning from experience.

We have no definitive answers to this dilemma but suggest that the very awareness of this tendency to revert to dichotomized thinking helps the clinician to once again open one's professional thinking to new data and a new perspective on a particular patient. In essence the health care provider needs to continually remind himself to avoid both premature closure and interminable assessment. For the psychologist this further means giving equal attention to the health facilitating and inhibiting psychological tendencies of each patient. Hopefully we can prove as adept at encouraging health as we have been at suspecting psychopathology.

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Equation	Cut off Score (greater than = Poor outcome)	Number Accurately Predicted Poor Outcome	Number Accurately Predicted Good Outcome	Number Falsely Predicted Poor Outcome	Number Falsely Predicted Good Outcome	% Patients Predicted Poor Outcome Accurately	% Patients Predicted Good Outcome Accurately
(30x Functional Limitation + 40x Patient Expectation + 4(F-K) /100	1.3	8	15	2	0	80%	100%
(40x Patient Expectation + Hysteria) /100	1.5	7	15	2	1	77%	94%
(3x Hysteria - 4K) /100	0	7	22	0	4	100%	85%
(4x Depression + Hysteria - Psychopathic Deviate - 100) /100	1.5	8	7	7	3	53%	83%

TABLE 1: Multiple Predictors of Outcome in Low Back Pain Patients and Retrospective Accuracy Rates

HYPOCHONDRIASIS
AND HYSTERIA
SCALE ELEVATION

Both $T \geq 75$

Both $T \geq 65$

One or Both
 $T \leq 64$

1	5
7	1
14	5

Good

Poor/
Very Poor

OUTCOME

Significant
Difference

No
Significant
Difference

TABLE 2: Conjoint Hypochondriasis and Hysteria Scale Elevation and Outcome in Low Back Pain Patients

PHYSICIAN RATING
OF PATIENT
EXPECTATION

Optimistic

Indifferent/
Pessimistic

14	1
3	7

Good

Poor/
Very Poor

OUTCOME

TABLE 3: Initial Physician Rating of Patient Expectation and Outcome in Low Back Pain Patients, Fisher Exact Probability Test, $p \leq .005$

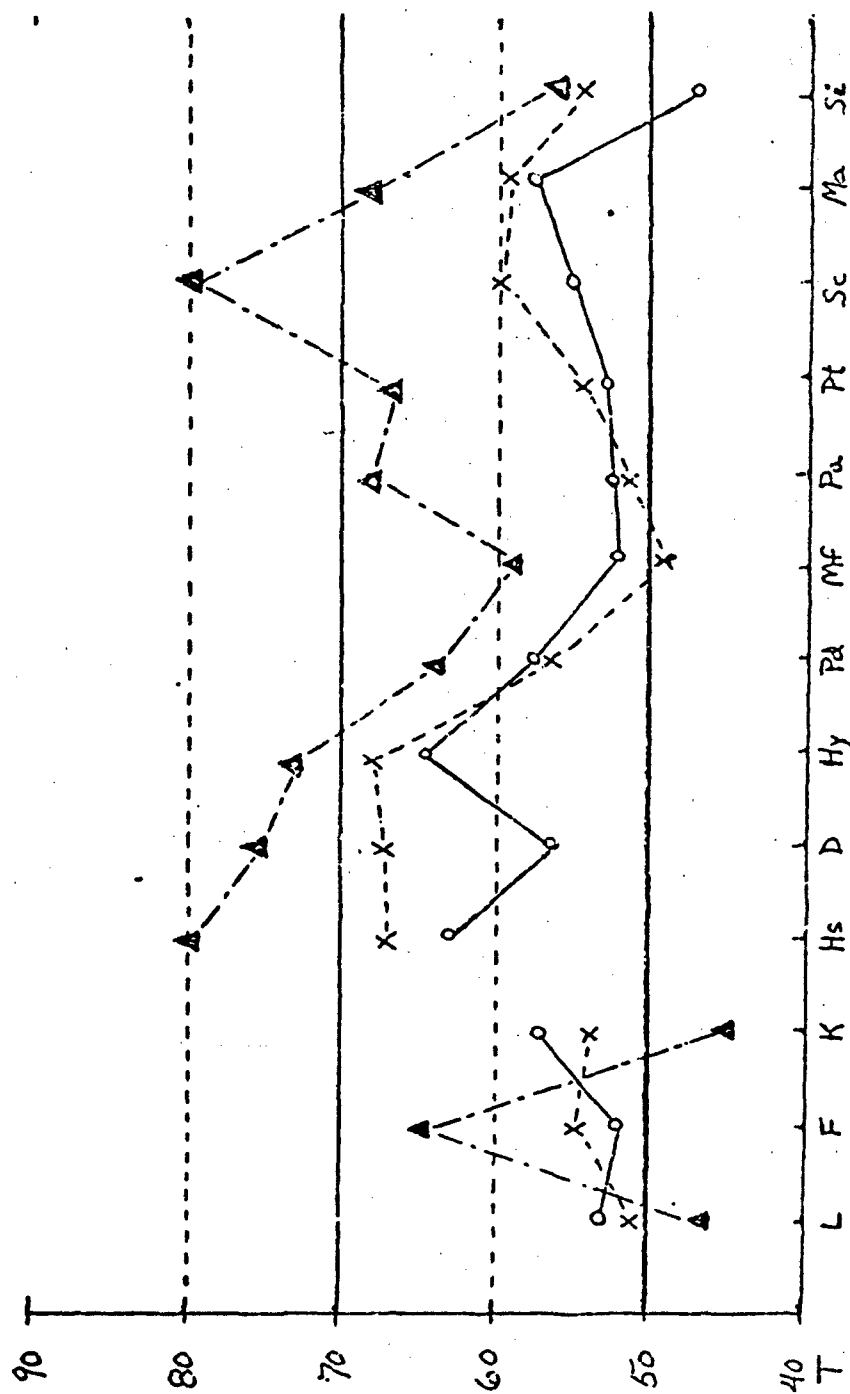


Figure 1: Mean Initial MMPI Profiles for Three Levels of Outcome

○—○ = Good Outcome (n=22) x---x = Poor Outcome (n=7) Δ-.-Δ = Very Poor Outcome (n=4)

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HYPNOSIS IN ARMY AVIATION: A Case Study

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ABSTRACT

The hypnotic interview is recommended as a viable procedure and a useful tool in aviation accident investigation. In the case study presented, an Army aviation accident investigation board for the first time accepted into evidence information obtained in a hypnotic interview. The hypnotic interview provided the board with evidence which was not previously obtained by other investigative techniques and which proved to be invaluable in the investigative and decision making process. The evidence suggested mechanical failure in a specific component, which laboratory testing later confirmed. The accident investigation board reversed the original opinion of "pilot error" to a unanimous decision of "mechanical failure". The defective component would not have otherwise been discovered without the evidence from the hypnotic interview.

Hypnosis is a well documented phenomena which has proven to be a useful therapeutic tool in the fields of medicine, dentistry, and clinical psychology (Crasilneck, 1975). In spite of a growing body of scientific data, there is still doubt, controversy, and debate over the value of the hypnotic technique. Gradually, however, hypnosis is being accepted within the scientific community and is now generally recognized as both a useful clinical tool and an important area of research.

The present study recommends the use of the hypnotic interview as a viable procedure and an important tool in aviation accident investigation. The hypnotic interview and the specific technique of age regression allows a person to relive or re-experience earlier events of his life while in a trance state. Information obtained in this manner is presented as invaluable in the investigation of aircraft accidents. Hypnosis is especially indicated in cases of retrograde amnesia and psychological repression.

Alkov (1977) reports that hypnosis has been considered for use in the interrogation of witnesses and survivors of Navy aircraft accidents and documents several cases where the hypnotic interview was used successfully in accident investigations. In one such case, Alkov quoted a Medical Officer's Report as stating, "It is felt that the use of post-flight hypnosis by the board was invaluable in determining the most probable sequence of events in this accident" (p 1). From his review of the evidence available, Alkov recommended in his report to the Naval Safety Center that the "Navy utilize the hypnotic interview technique in accident investigations only in those cases where the evidence

obtained would be helpful, the witness cooperative, and the data kept confidential" (p 6). He concluded that the hypnotic interview is a useful procedure as an accident investigation technique only where the "witness is cooperative, is suffering from retrograde amnesia, material evidence from the accident is available to substantiate data from such an interview, the witness could shed light on the matter and no other procedure is available or practical, and the data obtained is used for accident prevention purposes only" (p 6).

The Air Force takes the official position that "The use of truth serums, hypnotic techniques/drugs, or polygraph tests is prohibited in and USAF accident investigation or inquiry" (Air Force Regulation 127-4 Section C, Paragraph 12a). This position is in agreement with rulings of the United States Supreme Court and the general position of the American Judicial System. The Military Court Martial Manual also took the same stand in ruling that evidence obtained through the use of drugs, polygraph tests, or hypnosis is inadmissible (1969).

At the 17th Joint Services Aviation Conference held at the Naval Safety Center in August of 1978, the tri-services published a final report which recommends that hypnosis should not be used as an investigative tool by military aviation accident boards. However, the report noted that this ruling should not preclude the use of hypnosis for research. The U.S. Army has accepted the recommendation and the official position now eliminates the use of hypnosis for accident investigation (Berliner, 1978).

This paper presents a case study of a hypnotic interview used to investigate an Army Aviation accident. This is the first reported case where an Army aviation accident investigation board accepted into evidence the information obtained in the hypnotic interview. The information proved to be invaluable in both the investigation and the decision-making process.

THE HYPNOTIC INTERVIEW: A CASE STUDY

Referral

In the summer of 1977, a 28 year old male officer aviator was referred to the Division Psychologist by the Division Surgeon for treatment of anxiety, guilt, and retrograde amnesia following an aviation accident. Two days prior to the referral, the officer, (hereafter referred to as the pilot) and a warrant officer aviator were involved in a major aviation accident which occurred seconds after the lift off of their AHIG helicopter. The pilot was at the controls of the Army helicopter when it crashed. No other aircraft were involved and no one was injured.

In making the referral, the Division Surgeon inquired into the possibility of the use of hypnosis for investigating the period of time during which the officer reported a lapse of memory. The Division Psychologist explained the uses and precautions of a hypnotic interview and indicated that the technique was well established in scientific literature. The Division Surgeon recommended the utilization of hypnosis with the specific goal of assisting the pilot to recall the events that occurred in a matter of seconds just prior to, during, and after the aviation accident, thereby helping the pilot resolve his guilt and

anxiety. The Division Psychologist agreed to consider the technique and to further discuss its use with the pilot.

Session 1

The pilot was seen by the Division Psychologist on the tenth day following the aircraft accident. He reported complaints of anxiety, problems sleeping, and stomach distress. Other than these symptoms of anxiety and guilt, the pilot's mental status was within normal limits. He was bright, articulate and cooperative. He was highly motivated to relieve his anxiety and was very interested in trying to recall the chain of events which led to the crash.

The pilot reported that he was resigned to the fact that he had caused the crash. He stated his desire for therapy as "I just want to know what I did wrong". The pilot also informed the psychologist that the Aircraft Accident Investigation Board had tentatively ruled "pilot error" as the reason for the crash. All that the pilot felt was left to accomplish was to resolve the guilt and to learn something from the crash so that he would not make the same mistake again.

Hypnosis was discussed and determined to be the treatment of choice for this case. The pilot was seen as an appropriate and highly motivated candidate for hypnotic age regression. Before proceeding with the induction of hypnosis, the psychologist explained the hypnotic procedures and trance states and explored the pilot's possible misconceptions about hypnosis. A verbal contract was established which clearly outlined the confidentiality of the treatment. The information obtained would be for the use of the pilot and for treatment purposes only. The pilot, however, could use the data obtained in the interview in a way he felt was appropriate.

After an hour of screening and psychological evaluation, the hypnotic interview was conducted. The hypnotic trance state was induced using the relaxation technique. The trance state was deepened by the use of hand levitation, counting, and imagery. The pilot proved to be an excellent hypnotic subject and was induced to a medium to deep trance state as verified by glove anesthesia and a positive hallucination (A Syllabus on Hypnosis, 1973).

The pilot was age regressed to the day of the accident and told to "relive the experience in every detail with complete and total recall"; he was instructed to verbally report all that he saw and experienced.

The pilot was able to return in time to the restaurant where he was eating lunch prior to take-off. He slowly recalled and described his actions and thoughts. He spoke in the first person, present tense. He continued without incident until he arrived at the aircraft and began the pre-flight check. After climbing into the aircraft he reported that he was very hot and began to show physical signs which the psychologist was able to observe. He began to perspire and his respiration increased. He explained that he could not turn on the air conditioner until after the engine was started and runup completed. He continued through the pilot's checklist until he initiated engagement of the SCAS channels (TM 55-1520-221-CL, 1971). At that

point the pilot stated that when he looked up to check the rotor system as required when the SCAS channels are engaged, he could not see anything. He began to show signs of panic as he stated that he could not go further. He reported that he was afraid and that everything was going black. The hypnotic interview was terminated at that point. The pilot was given the suggestion that he would have total recall of the interview and was then gradually awakened by the backward counting technique.

After returning to a normal waking state, the pilot was debriefed on the hypnotic experience. He reported that the age regression had allowed him to remember the events in greater detail. He further reported that at times it was as though he was looking out of his own eyes while at other times it seemed that he was watching the action and was able to see everything, even things his eyes were not focusing on. A discussion of the pilot's inability to complete the sequence of events strongly suggested that his memory was being blocked by his fears. A follow-up session was scheduled to continue the hypnotic interview.

Session 2

In the second session, induction and deepening was accomplished using relaxation and levitation. A deep trance state was obtained. The pilot was regressed in time to a period just prior to entering the aircraft and he again began to describe the sequence of events. When he reached the SCAS engagement on the checklist, he reported that he could not see out of the aircraft. It was as if a darkness had enveloped the canopy. The pilot again began to show physical signs of panic such as perspiration and increased respiration. He was encouraged to skip the SCAS and continue with the engine runup. He continued through the checklist until he began to "pull power" and felt the aircraft become "light on the skids". In obvious panic he then exclaimed "I can't go any further, if I go further I'm going to die." The hypnotic interview was terminated at that point.

Session 3

Hypnosis was induced to a deep level and the pilot was regressed to a period of time just prior to his entering the aircraft. He related the sequence of events almost word for word as he had in the previous two sessions. When he reached the point where he had engaged the SCAS he said, "I'm looking up, but I don't see anything because I'm not looking at the blade". He indicated that instead of looking at the rotor blade as required in the checklist, he had looked at the aircraft to his left. He then continued with the sequence of events. As he brought the aircraft to a hover, he began to pull collective and add power in preparation for takeoff. Suddenly, the pilot's body made a jerk and his right hand moved rapidly forward toward and then beyond his right knee as he began to experience a violent abreaction. He began making movements as if he were trying to pull his hand back and he screamed "Oh God, I'm going to die, I'm going to die." His body jerked again as he indicated that the blade hit the ground and the aircraft crashed. He continued by explaining in great detail the actions taken to get out of the aircraft and the conversations which took place just after the crash.

While still in trance, the pilot was asked to return to present and explain what had happened. He stated that the cyclic violently and rapidly jerked right forward pulling his hand with it. He pulled with all his strength, but the cyclic did not return to center position until after the rotor blade hit the ground. The hypnotic interview was terminated and the pilot was returned to his normal waking state.

In the discussion following the hypnotic interview, the pilot reported that prior to the session he had no recall of the cyclic making such a movement. He now felt that some kind of malfunction had occurred. Until this point he was convinced that he made a pilot error. He requested that the hypnotic age regression be repeated so that he could re-experience the crash sequence in order to better understand what had happened.

Session 4

The pilot reported that he went to the board between sessions and explained what he had experienced. He requested that he be allowed to make an audio cassette recording of the present session. The board had agreed to listen to the tape with the understanding that it might be admitted into evidence.

A trance state was induced and the pilot was age regressed to a time prior to the crash. He then described the action as he again relived the crash sequence. The pilot again experienced a violent abreaction as the cyclic jerked to the right front and he tried to pull it back to the center position. The cyclic only returned after the rotor blade hit the ground and the aircraft had crashed. The pilot's description of the crash sequence was almost identical in every word and action with the reports given in the previous sessions.

While still in a trance state, the pilot was returned to the present and asked to explain what had happened. He contended that the cyclic had moved without pilot input. This, he explained, could only have occurred as a result of some sort of mechanical malfunction. The hypnotic interview was then terminated.

Board Hearing

In the afternoon following the fourth session, the pilot telephoned to request that the psychologist attend the next hearing of the aviation accident investigation board to present professional testimony. At the pilot's specific request, the psychologist agreed. The president of the board telephoned later to officially request the testimony of the psychologist.

At the hearing the following morning, the psychologist listened to the audio recording of the fourth session along with the board members and was then called upon to provide professional testimony. The board requested information on the hypnotic procedure and their reliability. The board members then discussed with the psychologist, the information on the tape and its implications.

With both the pilot and the psychologist in the hearing room, the board indicated that the evidence from the hypnotic interview had raised a number of questions

which they would like to have answered. The pilot volunteered to consent to another hypnotic interview and recommended that the board members be in attendance. The board agreed to hold a special hearing with the pilot appearing as a witness while in a hypnotic trance state.

Session 5: Hypnosis on the Witness Stand

The fifth hypnotic age regression was induced in a manner identical to the previous sessions. This session, however, was held in the presence of the board members. The pilot was able to vividly relive and describe the crash sequence with a similar violent abreaction to the loss of control of the cyclic and the resultant crash. The sequences was described by the pilot almost word for word as previously reported. The only difference in this session was that the board members had prepared specific questions for the psychologist to ask of the pilot. The asking of questions did not interrupt the flow of the action nor did it detract from the reliving of the crash sequence.

The board had photographs of the crash area which the pilot had not seen. From the photographs they prepared questions requesting detailed information about the physical surroundings. In addition, questions were asked about adherence to the checklist, the readings on the gauges, and details of the movement of the controls.

RESULTS

The final report and all supporting evidence from the aviation accident investigation is contained in the Technical Report of U.S. Army Aircraft Accident, Case Number 770627-1430-66-15338. The summary of the actions of the board prior to the hypnotic interview states, "the board pursued hypnamic rollover (pilot error) as a primary suspected cause of the accident ..." (p 4). However, after obtaining the evidence from the hypnotic interview, the board actively pursued an investigation of mechanical failure. Although the physical evidence from the aircraft had been inspected and analyzed, the hypnotic evidence obtained from the pilot suggested that further physical analysis was required. The board, therefore, requested a "teardown" analysis of components that would not otherwise have been inspected. The Teardown Analysis Report contained in the Technical Report indicated, "excessive internal leakage ... (in the system) ... and revealed an extremely deteriorated ... (component) ... which resulted in the experienced hard-over condition noted by the pilot" (p 3). The board's unanimous decision was mechanical failure as cause of the accident.

DISCUSSION

The evidence in this case which was obtained from a hypnotic interview proved to be invaluable in both the investigative and decision-making process of the Aviation Accident Investigation Board. The case set a precedent for Army aviation accident investigation. The Aviation Accident Investigation Board, Case Number 770627-1430-6615338, for the first time, accepted into evidence information obtained in a hypnotic interview. Further, the Board allowed direct testimony from a witness on the stand who was in a hypnotic trance state.

The case presented directly contradicts the recommendation of the 17th Joint Services Aviation Safety Conference. It is the opinion of this investigator that the conference recommendation is an over-reaction which may not have been based on the available research data. Hypnosis can be an extremely valuable tool when used appropriately and professionally. Indeed, precautions should be taken, but complete elimination of hypnosis from accident investigation is a waste of a useful and valuable resource.

Incorporating the available research data and acceptable clinical procedures, the following recommendations and precautions are presented as guidelines for the use of hypnosis in aviation accident investigation.

1. The hypnotic interview should only be considered after all other traditional methods of gathering evidence have been exhausted.
2. The hypnotic interview would be indicated in cases where the witness is suffering from retrograde amnesia.
3. The witness must volunteer for the hypnotic interview and must be cooperative and highly motivated.
4. The witness must be psychologically evaluated and cleared before the use of hypnosis. The evaluation should include a mental status examination, an exploration of the possible symbolic meaning of the amnesia, and should rule out psychosis, severe depression, or suicidal ideation.
5. The hypnotic interview must be conducted by a qualified and professional hypnotherapist.
6. Evidence obtained from the hypnotic interview should be viewed as any other testimony accepted as evidence. The hypnotic evidence should be substantiated by other sources of material evidence. Evidence obtained in a hypnotic interview does not constitute irrefutable fact.

This investigator believe that the conference recommendation is an over-reaction which may not have been based on the available research data. Hypnosis can be an extremely valuable tool when used appropriately and professionally. Indeed, precautions should be taken, but complete elimination of hypnosis from accident investigation is a waste of a useful and valuable resource.

Given the pre-cautions and the procedures outlined above, the hypnotic interview should be accepted as a legitimate and useful investigative tool. The recommendation of the 17th Joint Services Aviation Safety conference should be challenged and a change in the rules of evidence should be made to allow information from the hypnotic interview to be accepted as official testimony.

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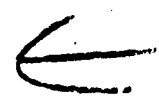
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PSYCHIATRIC SYMPTOMS AND SYNDROMES AS RELATED TO DEVIANCIES IN BRAIN FUNCTIONING AND STRUCTURE: REVIEW OF RESEARCH AND ROLE OF CLINICAL NEUROPSYCHOLOGY

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This paper reviews research associating various psychiatric disorders and symptoms with deviant aspects of human brain functioning. Most of the data reviewed relate psychiatric conditions to the presence of certain behavioral characteristics which are presumed to reflect some underlying abnormality in brain functioning. Relevant studies on heterogeneous psychiatric populations, schizophrenia, learning and behavior disorders, and certain specific personality variables are examined. Inferences are drawn regarding the hypothesized relationship of brain dysfunction to psychiatric disorders and the particular symptom clusters and behavioral characteristics that might be relevant in this respect are identified. Additionally, the potential contributions of Neuropsychology to both clinical and research efforts in this area are discussed.

This paper presents a review of the relevant research associating certain kinds of abnormal human behavior with abnormal states of human brain functioning. Some data is provided which directly relates definite and well-known abnormalities in brain function and structure to psychiatric conditions. The majority of areas reviewed, however, have depended upon studies associating psychiatric and psychological characteristics and conditions to behavioral indices which presumably reflect the presence of some abnormal state of brain functioning. In other words, some underlying deviancy or deficiency in brain functioning is inferred in many of these studies due to the presence of symptoms thought to be caused by such dysfunction. Thus, much of the evidence reviewed is rather indirect with respect to the topic at hand and, at best, reflects associational but not necessarily causal relationships.

In the paragraphs below, relevant research is reviewed from a number of areas of investigation, including schizophrenia, "minimal brain damage" and hyperactivity and specific personality characteristics and traits. Psychiatric disorders with well-established organic etiologies (such as Alzheimer's disease, arteriosclerotic brain disease, etc.) are not discussed, and an excellent review of the current status of research with these diseases can be found in Wells (1978).

INTRODUCTION

The relationship of central nervous system functioning to deviant or abnormal behavior seems compelling. Malzberg (1959) states that neurological disorder

ders account for around 30% of all first admissions to mental hospitals. Wells (1978) states that psychiatrists are becoming increasingly more sensitive to the role of brain dysfunction in many of the complaints and disorders manifested by their patients. He goes further to suggest that possibly 40% of chronic psychiatric inpatients have some sort of undiagnosed central nervous system disorders. Studies of consecutive admissions to inpatient psychiatric settings have demonstrated significant relationships between measures of intactness of brain functioning and a variety of psychiatric disorders (Rochford, Detre, Tucker & Harrow, 1970; Tucker, Campion & Silberfarb, 1975). Rochford et al. (1970) found a significantly higher incidence of minor neurologic signs (subtle movement disorders, gait incoordination, dystereognosis, graphesthesia, etc.) in a sample of young adult psychiatric patients than in a sample of control subjects. Likewise, Tucker et al. (1975), utilizing 109 consecutive inpatient admissions, reported a significant relationship between general presence of psychiatric disturbance and neuropsychological abnormalities (e.g. cognitive impairments, motor and sensory abnormalities).

Thus, research efforts on heterogeneous psychiatric subject samples have demonstrated relationships between various performance deviances thought to be associated with brain dysfunction and a variety of psychiatric conditions. Research carried out on various diagnostic sub-groups is presented below in order to examine the findings on specific syndromes, symptoms, and characteristics.

SCHIZOPHRENIA

Detailed reviews of the research on neuropsychological and neuroanatomical abnormalities in schizophrenics can be found in Mirsky (1969), Reitan (1977), and Shagass (1972). These authors reported findings in which schizophrenics were differentiated from normal subjects on a variety of parameters, including electroencephalographic abnormalities, evoked response measures, and skeletal muscle and subterminal motor neuron abnormalities. Haug (1962) reports abnormal pneumoencephalographic findings in 61% of 137 schizophrenic patients. After removal of patients with various complications (head injuries, etc.) from this group, 58% of the remaining 101 schizophrenics manifested abnormal findings. Haug points out that these percentages were well above the frequency of abnormal pneumoencephalographic findings in the controls.

Data from studies emphasizing neuropsychological measures provide equally interesting findings. Dimond and Beaumont (1974) cite evidence based on the visual half-field techniques of neuropsychological investigation and suggest that schizophrenics have some kind of deficiency in interhemispheric integration. These authors hypothesize that the disturbances of thought, affect, and perception noted in schizophrenics could well be associated with deficits in higher-level neuro-psychological organization. Additional evidence from studies emphasizing perceptual measures (Elmont, Birch, Klein & Pollack, 1964; Quitkin, Rifkin & Klein, 1976) and intellectual ability (Quitkin et al., 1976) further substantiate the association between a diagnosis of schizophrenia and various neuropsychologic abnormalities.

Based on this sampling of research, one is readily aware of the various neuro-anatomical, neurophysiological, and neuropsychological parameters which appear to differentiate schizophrenics from samples of non-schizophrenic control subjects. The various authors, however, all point out that the results obtained are correlational in nature and do not necessarily imply that the various factors studied are causative agents in schizophrenia. In fact, the majority of evidence to date would suggest that schizophrenia itself is a very heterogeneous entity and that schizophrenics may perform somewhat differently on measures of perception and intellectual ability depending upon their particular premorbid characteristics. Specifically, the evidence suggests that schizophrenics with marked behavior disorders as children, premorbid asocial personality characteristics and a slow insidious onset of the disorder tend to perform more poorly on various psychological measures which presumably can be related to brain functioning (Belmont et al., 1964; Heaton, Baade and Johnson, 1978; Quitkin et al., 1976). In fact, Heaton et al. (1978) indicate that the chronic or process schizophrenics tend to perform on a variety of neuropsychological measures in a manner essentially indistinguishable from individuals with known impairments in brain functioning. It seems therefore possible that many schizophrenics may in fact have deficiencies or deviances in brain functioning which may be related to the etiology and manifestation of the disorder.

LEARNING AND BEHAVIOR DISORDERS IN CHILDREN AND ADULTS

Attempts have been made to relate a variety of children's learning and behavior disorders to various psychiatric conditions found in adulthood. A significant etiological factor in these learning and behavior disorders is presumably some sort of subtle impairment or deviancy in brain functioning labeled by some authors as "minimal brain dysfunction" (Bellak, 1977). In fact, terms such as "hyperactivity," "learning disability," "minimal brain dysfunction," etc. are all used by various authors in a somewhat interchangeable and often confusing manner to refer to a variety of symptoms and syndromes whose etiology may involve some subtle deficiencies or deviances in brain functioning (Bellak, 1977; Knights & Bakker, 1976; Rourke, 1975). In the following paragraphs, a number of articles are reviewed which attempt to relate symptoms of various learning and behavior disorders (and, presumably, underlying deficiencies or deviances in brain functioning) to a variety of psychiatric disorders.

Studies of hyperactive children, their parents, and adults who had been hyperactive as children have produced a variety of findings. An increased incidence of alcoholism, antisocial and sociopathic characteristics, and hysteria have been reported in the parents of hyperactive children (Cantwell, 1972; Morrison & Stewart, 1971). In fact, Cantwell (1972) suggests that a significant percentage of the parents of his hyperactive children were themselves hyperactive as children. In studies of adolescents who were felt to be hyperactive as children, a significant incidence of excessive alcohol consumption, lower levels of occupational achievement and more severe and pervasive antisocial problems were reported (Mendelson, Johnson & Stewart, 1971; Schukit, Petrich & Chiles, 1978). Additionally, with respect to alcoholism, Tarter (1976) reports that some alcoholics may exhibit neurological "soft signs" and perhaps may have been hyperactive as children. He states that severe alcoholics reported four times as many symptoms of "minimal brain dysfunction" in childhood as less severe alco-

holics. In studies involving adults who had been diagnosed hyperactive as children, a significantly increased incidence of serious psychiatric disorders, including psychosis, is noted, as well as a generally lower level of socio-economic and occupational attainment (Borland & Heckman, 1976; Menkes, Rowe & Menkes, 1967).

Together, the findings from the above studies suggest that the effects of hyperactivity or "minimal brain dysfunction" may persist into adulthood and have serious personal and social consequences for the individual. In fact, a number of authors have postulated the existence of a syndrome they choose to call "minimal brain damage in adults" or "adult brain dysfunction" (Hartocollis, 1968; Mann & Greenspan, 1976; Quitkin & Klein, 1969; Shelley & Riester, 1972). Mann and Greenspan (1976) elaborate on the syndrome they identify as "adult brain dysfunction". They state that adults who had "minimal brain dysfunction" as children do not in fact grow out of this problem, but that these difficulties persist into adulthood and may be accompanied by a variety of personality characteristics, behavior patterns and psychiatric symptoms. These authors contend that the effects of "minimal brain dysfunction" are manifested differently in adulthood, as compared to childhood. They state that the symptoms of hyperactivity and impulsivity are modulated to some degree by the learning and maturation process, and they suggest that a child with these difficulties who grows up in a supportive and positive environment may manifest few or even no serious adaptive problems as an adult. Variables in the family history reportedly associated with "adult brain dysfunction" are: a history of learning disability, poor impulse control, short attention span, distractibility, alcoholism, and periodic endogenous depression.

Treatment of "minimal brain dysfunction" in adults has involved both psychotherapy and psychopharmacological measures (Mann & Greenspan, 1976). Various medications, including Methylphenidate Hydrochloride, Imipramine and tricyclic antidepressants have been used, and the results reported indicate improvements in planning and organization ability (Gross & Wilson, 1974; Mann & Greenspan, 1976), attention, concentration, degree of anxiety, and energy level (Arnold, Strobel & Weisenberg, 1972; Gross & Wilson, 1974; Mann & Greenspan, 1976; Wood, Reimherr & Wender, 1976). According to Mann and Greenspan (1976), patients who respond best to the medication are those with a history of early learning disorder and short attention span who, as adults, present with anxiety, depression and perhaps multiple symptoms and complaints. Thus, an association seems possible between a number of psychiatric symptoms frequently seen in adult patients and subtle deviancies or deficiencies in brain functioning presumed to underlie certain learning and behavioral problems in children.

SPECIFIC PERSONALITY TRAITS AND CHARACTERISTICS

Differences in styles of emotional expression and reactivity have been found to be associated with the particular cerebral hemisphere which manifests impairment (Gainotti, 1973; Lezak, 1976, pp. 47-48; Louks, Calsyn & Lindsay, 1976). Based on indices of lateralization determined by neuropsychological procedures, the obtained results are rather consistent in associating anxiety, depression, extreme sensitivity to one's disabilities and the so-called "catastrophic reaction" (Lezak, 1976, p 47) with left hemisphere impairments. On the other hand, deficits

in right hemisphere functioning seem more closely related to tendencies to deny and make light of one's deficits and, in extreme cases, unawareness of significant areas of difficulty (Gianotti, 1973). Significantly less dissatisfaction with manifest disabilities and periodic irresponsible behavior may also be noted in individuals with right hemisphere impairments. Thus, evidence based on studies of individuals with known impairments in brain functioning suggests that certain predictable varieties of emotional style and expression may become apparent following brain damage or disease in particular locations. Perhaps very subtle deviancies or weaknesses in one or both cerebral hemispheres could be related to certain personality characteristics consistently manifested by an individual in whom no "hard" medical evidence of brain damage or disease is found.

Violent behavior has been systematically related to brain function and dysfunction (Mark & Ervin, 1970). Spellacy (1978) compared the performances of two groups of prisoners on a series of neuropsychological tests and the Minnesota Multiphasic Personality Inventory. One group had a history of repeated violent and assaultive behavior, and the other group had an essentially negative history of such acts. Classification of subjects as either violent or non-violent was achieved with 95% accuracy, using the neuropsychological test battery alone. Results with the MMPI on the same task achieved 79% classification accuracy. The violent subjects were reported to have performed generally more poorly on the neuropsychological tests than did the non-violent subjects. Tests of cognitive, language, perceptual and perceptual-motor abilities were employed. Spellacy suggested, in conclusion, that the violent subjects were perhaps suffering from impaired brain functioning, specifically with respect to central nervous system integration and control. He suggested the use of neuropsychological tests to identify and study violent or potentially violent individuals.

Krynicky (1978) studied three groups of individuals with a series of neuropsychological tests and electroencephalographic examinations. One group was composed of individuals with chronic behavior disorders, together with a history of multiple assaults; a second group consisted of individuals with chronic behavior disorders whose histories were essentially free of assaults; the third group consisted of individuals with verified organic brain disease. The non-assaultive group was statistically distinguished from the assaultive group and organic brain disease group on a number of variables, including EEG abnormality, degree of manual dominance, perseveration errors on a visual-motor task and measures of verbal short-term memory. The performance of the assaultive group was reported to more closely resemble that of the individuals with organic brain disease rather than that of the non-assaultive group. Additionally, the left cerebral hemisphere was hypothesized to be more often dysfunctional in individuals who have a tendency toward physical violence.

Other studies attempting to link various personality characteristics with deviancies in brain functioning reveal results essentially consistent with those noted above. Quitkin et al. (1976) report an increased incidence of neurological "soft signs" and lower scores on tests of intelligence and auditory-visual integration in individuals with emotionally unstable character disorders. Neuringer, Goldstein and Gallaher (1975) report a relationship between minimal impairment or lessened efficiency of performance on Halstead's neuropsychological test battery and

field dependence-independence, as measured by the rod and frame test. Specifically, these authors report that subjects exhibiting minimal impairment or lessened efficiency on Halstead's battery tend to be more field-dependent.

INFERENCES

The above review suggests a number of inferences at this point. First, identified or inferred deviancies or impairments in brain functioning seem consistently associated with a variety of psychiatric symptoms and syndromes manifested by adults. These findings appear consistent over a broad range of research efforts and particular topics of interest. Emphasis, however, must be placed on the fact that all of these findings are associational in nature and do not prove that brain dysfunction is a causative agent in some adult psychiatric and psychological problems. Nevertheless, the co-occurrence of these two general classes of phenomena in the individuals studied appears suggestive.

Certain symptoms, syndromes, and characteristics seem especially significant in terms of the hypothesized relationship between psychiatric disorders and brain function and dysfunction. Schizophrenics with poor premorbid social adjustment, behavior disorders as children and a slow insidious onset of the condition typically perform like brain-damaged patients on a variety of psychological measures related to brain functioning. Individuals with a history of "minimal brain damage", hyperactivity and possible learning disability who, as adults, manifest a variety of serious psychiatric problems, including psychosis or severe and pervasive antisocial problems may, in fact, manifest evidence suggestive of some subtle abnormality in brain functioning which may be related to their difficulties. Some or all of the following may be present in the family history of such individuals: alcoholism, sociopathy and antisocial behavior, hysteria, periodic endogenous depression, hyperactivity and learning disability. Additionally, these individuals may manifest somewhat low occupational and social achievement relative to their peers. A history of repeated assaults and acts of violence seems relevant as does some tendency toward chronic cognitive disorganization and inefficiency. Also, abnormally high levels of anxiety and depression, as well as a history of multiple symptoms and complaints seems significant.

THE ROLE OF CLINICAL NEUROPSYCHOLOGY

At this point, then, a central premise is that some kind of abnormality in brain functioning may well be a significant factor in a variety of kinds of psychiatric and psychological conditions and disorders. This abnormality may be "subtle" and perhaps not easily identifiable by more common medical measures. Yet, it would seem quite important to attempt to establish the presence of this sort of condition in view of its potential contribution to the patient's difficulties and consequent treatment. Geshwind (1975) states that " . . . every behavior has an anatomy" (p 3) and that the " . . . brain is an important and often treatable cause of behavior disorders" (p 8). In the medical arena, more sophisticated and less dangerous techniques are becoming available for associating behavioral findings with actual structural abnormalities in the brain (Hier, LeMay, Rosenberger & Perlo, 1978). These procedures, however, won't provide the practicing clinician with significant information about the individual's adaptive strengths and weaknesses as they

are dependent upon the biological integrity of the brain. Wells (1978) states that even subtle or mild disturbances in brain functioning can have serious effects on an individual's day-to-day adjustment. Most psychological and psychiatric treatment programs assume that the individual's brain functioning is biologically intact enough for that person to profit from, comprehend, and apply the experience gained in treatment. Certainly, it would seem of paramount importance for a clinician to be aware of any deviancies or impairments in brain functioning that might be significantly limiting factors in a patient's treatment or management program.


Clinical neuropsychology stands to be of considerable importance in contributing to a more in-depth understanding of the individual patient. Reitan (1977) states that subtle changes in neurological functioning not commonly identified on clinical neurological evaluations as may in fact be of considerable importance in the etiology of various psychiatric disturbances. Enough is known at this point about brain-behavior relationships to identify individuals by means of certain behavioral indices and measures who may have some biological deviation in brain functioning which contributes to their difficulties. Citing an example, Reitan states that changes in an individual's particular personality traits and style, sometimes described as "personality changes," may be closely tied in to subtle losses in reasoning, conceptualization and complex problem-solving abilities. Due to their subtlety and elusiveness, these deficits may not be detected in the course of a mental status examination nor would they be expected to be identified by traditional neuroradiological procedures. A clinical neuropsychological evaluation, however, such as the Halstead-Reitan Battery, is equipped to identify these kinds of difficulties and relate them to the status and functioning of an individual's brain (Reitan & Davison, 1974).

Reitan (1977) suggests a comprehensive effort to study the neuropsychological characteristics of psychiatric patients. He states that certain kinds of emotional disorders may have unique brain-behavior correlates in the individual in question. Unique variations in brain functioning not necessarily reflecting traditional kinds of brain damage and disease might underlie, in significant part, the development of some psychiatric problems. From a clinician's perspective, it would seem to be of considerable value to study the brain functioning of the individual patient in question. Particular attention should be given to adaptive strengths, weaknesses, and unique areas of ability or disability. These results could be applied to the psychological treatment and management of a variety of kinds of individuals. Particular attention might be given to those patients displaying some of the characteristics described in the "Inferences" section above. Based on the results of a clinical neuropsychological evaluation, a clinician can develop a more detailed and comprehensive understanding of a patient's adaptive abilities in relation to the biological condition of the brain. Such information might then be used to formulate a more effective plan to treating and managing the individual patient.

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A REVIEW AND UPDATING OF TRANSACTIONAL ANALYSIS GAME THEORY

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A two hour workshop was presented for the purpose of reviewing transactional game theory and techniques of therapeutic intervention into game behavior in individual and group psychotherapy. The workshop was directed to psychotherapists of diverse theoretical backgrounds.

After a brief review of structural and transactional analysis as developed in classical Transactional Analysis and modified by later theoreticians, the concept of games was presented and guidelines and methods for intervention into games were outlined. Finally, participants were given an opportunity to explore their own most common games as a technique in increasing self-awareness.

This paper is a brief overview of the concepts elaborated in the workshop through lecture, discussion, and experiential exercises.

THE CONCEPT OF GAMES

The most sufficient definition of transactional games comes from Berne: "Games are sets of ulterior transactions, repetitive in nature, with a well-defined psychological payoff" (1973, p 23). Transactional Analysis holds that people play games to structure time and manipulate others so as to gain predictable strokes and feelings, which are used to advance their life scripts toward denouement and to reaffirm their existential world view. Additionally, intimacy and its concomitant "riskiness" is avoided and more immediate psychodynamic needs are met through game playing. A working familiarity with patients' game transactions can be a valuable tool clinically, both diagnostically and therapeutically, regardless of the clinician's theoretical orientation.

Games were first described by Berne in a publication in Transactional Analysis in psychotherapy (1961). The concept was elaborated and over one hundred games were delineated, classified, and described in the 1964 bestseller Games People Play. Games were given colloquial names, a procedure consistent with Berne's commitment to demystifying psychiatry. Kick me, Now I've got you, you s.o.b., and If it weren't for you, for example, are commonly encountered games. In his last book, What do you say after you say hello? (1973), the formal definition of a game was clarified and the Karpman drama triangle (1968), commonly used in the analysis of games today, was incorporated into game theory.

Reconceptualizations of the phenomena of games have been contributed to TA theory in recent years, most notably by Schiff (1975), Kahler (1977), Holloway

(1977), and Goulding and Kupfer (See Goulding, 1977). Work in game theory is still actively being carried out.

TIME STRUCTURING

Berne was an existentialist in that he believes that humans have the responsibility of choosing how to structure their time and interpersonal interactions. His observation was that very little time is spent authentically, with honest, spontaneous, and unmasked interactions reflective of true encounter, or intimacy.

There are six basic classifications that can be made of behaviors for the short-term structuring of time and social interaction. The six classes are ordered from the least to the most authentic, in the sense of spontaneous/interpersonal exchange. The classes are:

1. Withdrawal, in which people do not overtly communicate with each other.
2. Rituals. These are circumscribed, stylized interchanges which convey little information and allow for very little idiosyncrasy. Rituals are programmed by tradition and social custom, and may be informal, such the "Hi, how are you" greeting rituals, or ceremonial and formal in nature, such as the traditional exchanging of wedding vows.
3. Activities. This class is commonly called work, in which transactions are shaped by the material with which the actors are working.
4. Pastimes, which are stylized and predictable, but require more creativity on the part of the participants. A typical pastime may be called NFL, in which the participants discuss football. Such interactions are semi-ritualistic, nonthreatening, and serve the purpose of pleasantly passing time while allowing an opportunity for the participants to "size up" each other.
5. Games.
6. Intimacy. "Bilateral intimacy is defined as a candid, game-free relationship, with mutual free giving and receiving and without exploitation" (Berne, 1973). Intimacy may be one-sided, rather than mutual. The ability to choose to enter into intimate relationships is a quality of autonomy, the ultimate goal of TA intervention.

GAMES THEORY

1. A game consists of a set of complementary ulterior transactions which progress to a well-defined, predictable outcome, or psychological payoff. Every game is therefore basically dishonest in that the initiator or agent pretends to be doing one thing in the transaction while he is really consciously or unconsciously doing something else.

2. Games are learned by children in interaction with their parents, family, and significant others. They are initiative in nature, and are handed down from generation to generation, as are scripts. Games are learned by the Adult ego structure in the child, which is so adept at understanding and manipulating others that it was termed the "Little Professor" by Berne. The two-three year old child actively initiates games in order to manipulate others. The transactions at that point are rather transparent, and their nature clear, but as a game becomes habitual and the initiator ages, its origin becomes obscure and its ulterior nature becomes more hidden from awareness.

3. Berne's final definition of a game can be represented by a formula: $C+G=R \rightarrow S \rightarrow X \rightarrow P$ (Berne, 1973). All games involve a con (C) because all games are ulterior transactions. The con--pretending to be doing one thing while in fact doing something else--works only if there is a "weakness" which it exploits in the respondent, such as fear, greed, sentimentality, or irritability (Berne, 1973). This "weakness" is the gimmick (G). After the respondent, or "mark", is hooked, the initiator pulls some sort of switch (S) (changes the psychological nature of the relationship). This is followed by the crissup (X), which is a moment of confusion experienced by the mark before he realizes what has happened. At this point the game ends, with both players having collected their payoffs (P). The payoffs are psychological in nature, consisting of feelings which the game arouses in the initiator and in the respondent. These predictable payoffs, most obviously in the case of the initiator, are the purpose of the game. The feelings are useful in reaffirming and justifying the player's basic existential stance in life. Autonomous, script-free behavior is successfully avoided.

"Why don't you--Yes but" was the first game isolated by Berne, and serves well as an example of games in general. It is commonly played in psychotherapy, and may be a two-handed game. It is even more common in group psychotherapy, where it may be a multi-handed game. The initiator, a patient, hooks the mark (S) by describing a personal problem (C). The group members, sentimentally viewing themselves as helpers (G) one after another, offer suggestions beginning with the phrase "Why don't you....." (R). The initiator rejects each of these suggestions in turn, explaining how he has already tried the suggestion, or the suggestion wouldn't work in his case, and so forth. Each of these sentences begins with "Yes, but....." (S). Finally the group lapses into silence (X), and the participants receive their respective payoffs. The initiator may feel reassured and secure in demonstrating that he has not surrendered his control of the situation. His stance of blamelessness and passivity in the face of life may be reaffirmed by this "demonstration" of the (purposefully exaggerated) magnitude of his problems and the impotence of the therapist and the group to help. The respondents may feel angry, inadequate, martyred, justified, indifferent, and so on, depending on their scripts.

In the terms of structural analysis, the YDIB initiator ostensibly is requesting information or behavioral suggestions, an Adult to Adult transaction. The responses also are ostensibly Adult to Adult. Psychologically, however, the transaction is Child to Parent, and Parent to Child, the Child message being "You can't possibly help me or make me grateful," and the Parent message being "I can help and make you grateful for my help." This, then, is another charac-

teristic of all games--the overt social transaction belies the covert psychological transaction. Put in another way, games are a species of ulterior transactions, and ulterior transactions are those in which two or more ego states are simultaneously cathected by at least one of the parties in the transaction.

INTERVENTION

Patience and caution are necessary attitudes for successful therapeutic intervention into games. Alternative ways of structuring time and eliciting strokes should be in the patient's behavioral repertoire, and he should be committed to change. Confrontation of games before these conditions are met, will understandably be met with strong resistance. Since games are such a ubiquitous part of interpersonal behavior and because their payoffs are such an integral aspect of an individual's psychological functioning, they occupy a primary place in the patient's structuring of time. Without the motivation and knowledge required to alternatively structure time, the patient will simply not know how to behave in many situations. Even when the above conditions are met, a feeling of despair will predictably follow the giving up of a game, and the therapist should be prepared to support the patient through this transition period.

Dusay (1966) lists four ways that therapists may respond to games:

1. Expose the game. This is an effective method of interpretation when the therapist is trusted and the patient's awareness of his game is on the verge of consciousness. It is essential that exposure be carried out in a timely and nurturing fashion. Confrontation that will be experienced as coming from a blaming, critical position is counterproductive, increasing defensiveness, and entrenching resistance to change. A hazard of confronting games is the temptation to play the Parental pastime of Blemish wherein faults are pointed out in a self-righteous, accusatory way.
2. Ignore the game. Clinical judgment may dictate that the time is wrong to deal with the game therapeutically.
3. Play the game. In initial stages of therapy the patient's Child needs reassurance, and the therapist may wish to provide this in part by playing along, with full awareness that he is doing so. Within this strategy, the game may be diminished by appropriate responses, thereby minimizing harmful payoffs.
4. Offer an alternative way of receiving the strokes which playing the game elicits.

Schiff (1975) emphasizing that every game begins with a discount (a process whereby a relevant and significant aspect of self, other, or the reality situation is ignored or minimized), recommends responding to games by confronting this initial discount in order to break up the game at the outset. WDYB, for example, can begin with the patient discounting his own ability to solve the problem presented to the therapist. Persistent confrontation of this discount will effectively stop the game.

paper, as an adjunct to a two-hour workshop in game therapy, presented a brief overview of the subject of games as elaborated in the workshop.

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